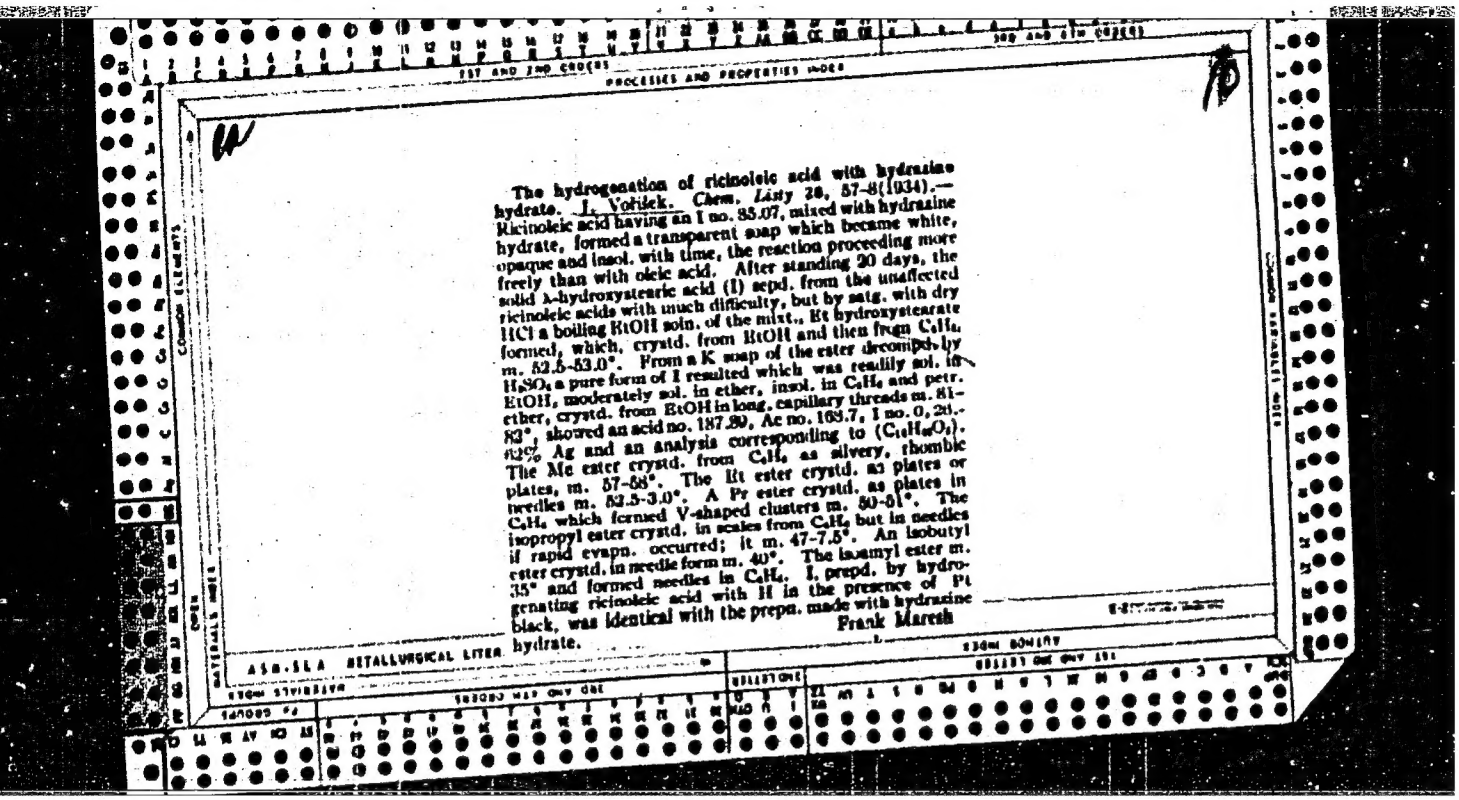
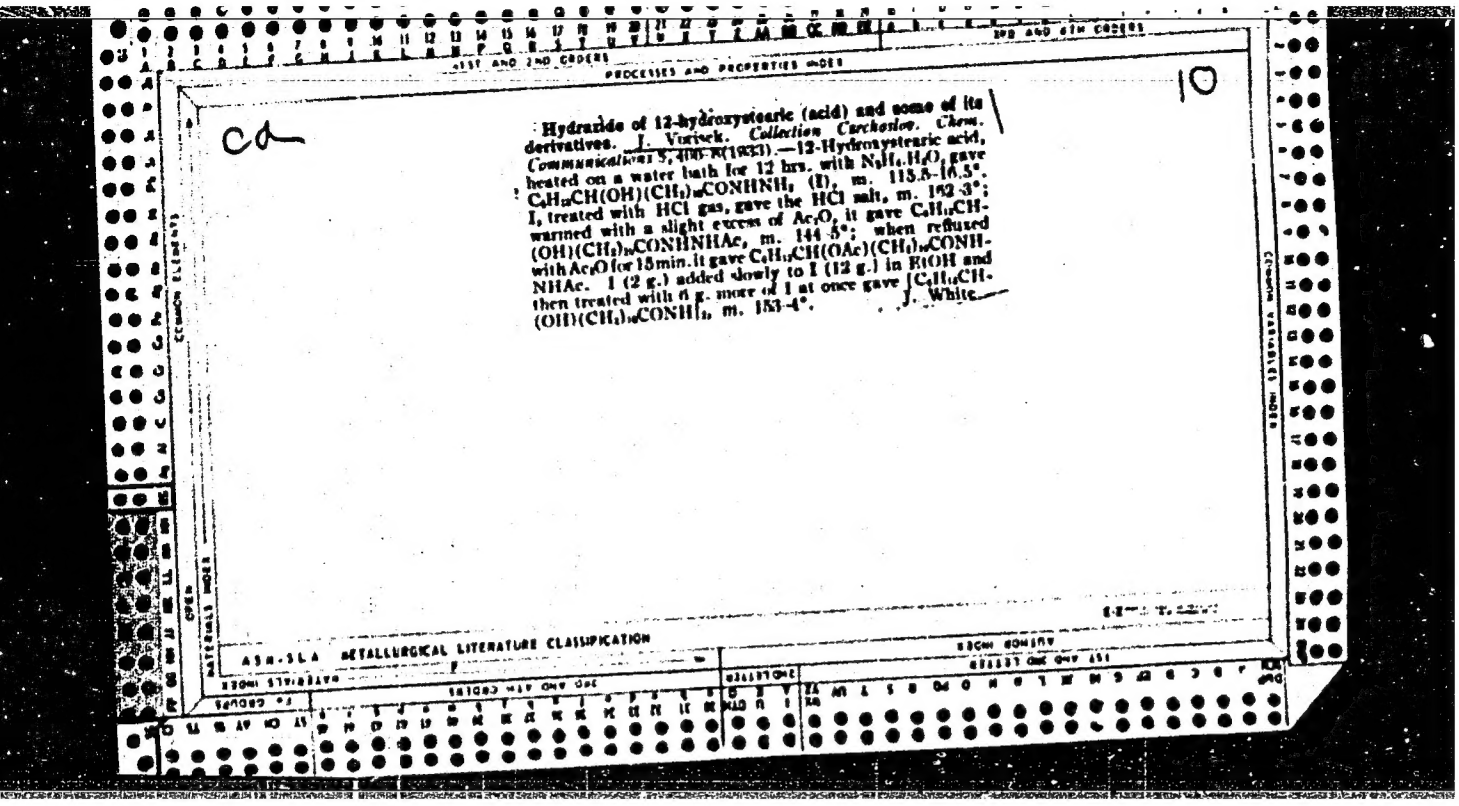


The hydrogenation of ricinoleic acid with hydrazine hydrate. J. Voříšek. *Chem. Listy* 28, 57-8(1934).—Ricinoleic acid having an I no. 85.07, mixed with hydrazine hydrate, formed a transparent soap which became white, opaque and insol. with time, the reaction proceeding more freely than with oleic acid. After standing 20 days, the solid λ-hydroxystearic acid (I) sepd. from the unaffected ricinoleic acids with much difficulty, but by satg. with dry HCl a boiling EtOH soln. of the mixt., Et hydroxystearate formed, which, crystd. from EtOH and then from C_6H_6, m. 52.5-53.0°. From a K soap of the ester decompd. by H_2SO_4 a pure form of I resulted which was readily sol. in EtOH, moderately sol. in ether, insol. in C_6H_6 and petr. ether, crystd. from EtOH in long, capillary threads m. 81-82°, showed an acid no. 187.89, Ac no. 163.7, I no. 0, 2h.-42% Ag and an analysis corresponding to ($C_{18}H_{36}O_3$). The Me ester crystd. from C_6H_6 as silvery, rhombic plates, m. 57-58°. The Et ester crystd. as plates in needles m. 52.5-3.0°. A Pr ester crystd. as plates in C_6H_6 which formed V-shaped clusters m. 50-51°. The isopropyl ester crystd. in scales from C_6H_6 but in needles if rapid evapn. occurred; it m. 47-7.5°. An isobutyl ester crystd. in needle form m. 40°. The isoamyl ester m. 35° and formed needles in C_6H_6. I, prepd. by hydrogenating ricinoleic acid with H in the presence of Pt black, was identical with the prepn. made with hydrazine hydrate.

Frank Mareš



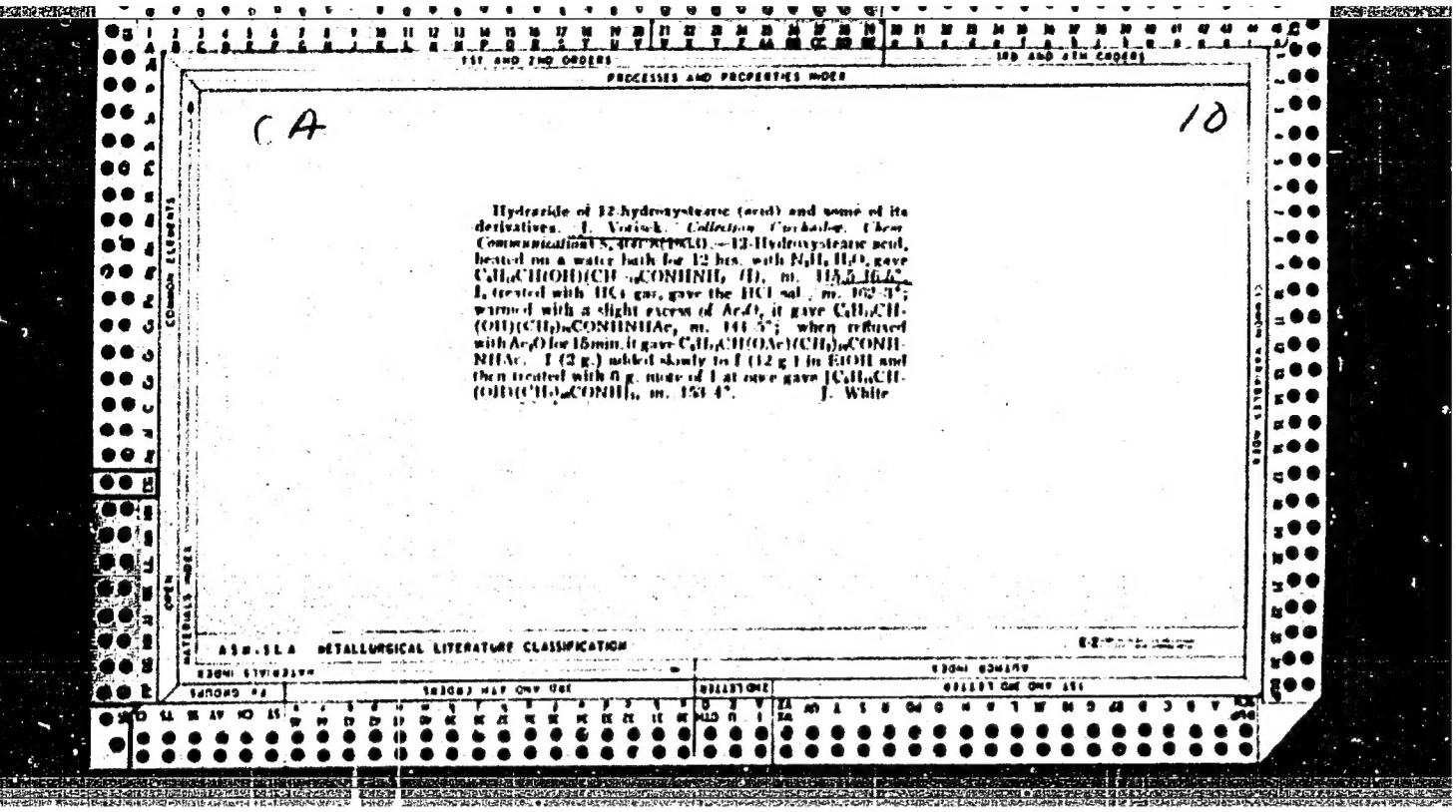
PROCESSES AND PROPERTIES INDEX

10

Ca

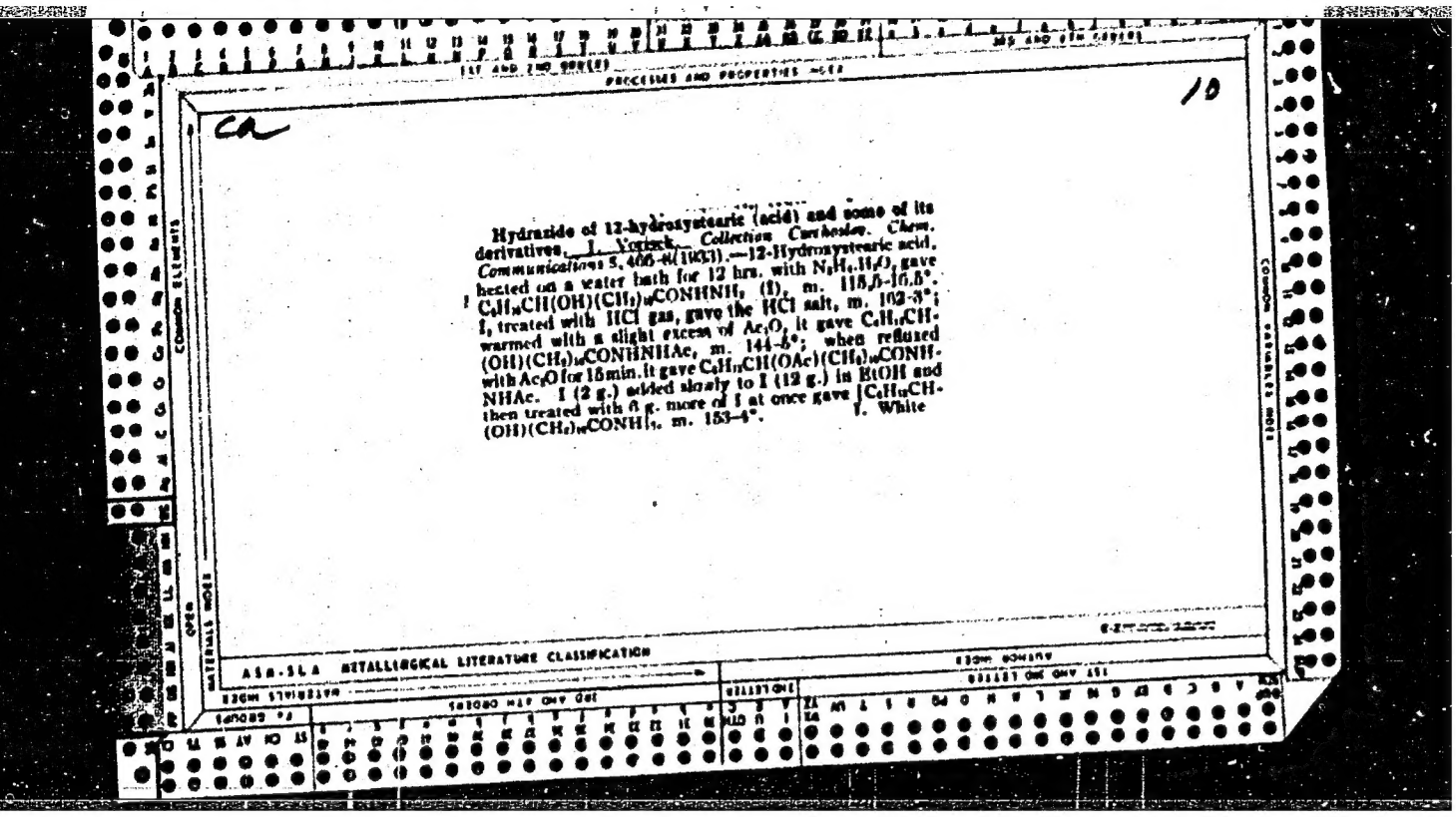
Hydrazide of 12-hydroxystearic (acid) and some of its derivatives. J. Vorisek. *Collection Czechoslov. Chem. Communications* 5, 400-8(1933).—12-Hydroxystearic acid, heated on a water bath for 12 hrs. with $N_2H_4.H_2O$, gave $C_5H_{11}CH(OH)(CH_2)_{10}CONHNH_2$ (I), m. 115.5–16.5°. I, treated with HCl gas, gave the HCl salt, m. 192–3°; warmed with a slight excess of Ac_2O, it gave $C_5H_{11}CH(OH)(CH_2)_{10}CONHNHAc$, m. 144–5°; when refluxed with Ac_2O for 15 min. it gave $C_5H_{11}CH(OAc)(CH_2)_{10}CONHNHAc$. I (2 g.) added slowly to I (12 g.) in EtOH and then treated with 6 g. more of I at once gave $C_5H_{11}CH(OH)(CH_2)_{10}CONH_2$, m. 153–4°. J. White

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA 10

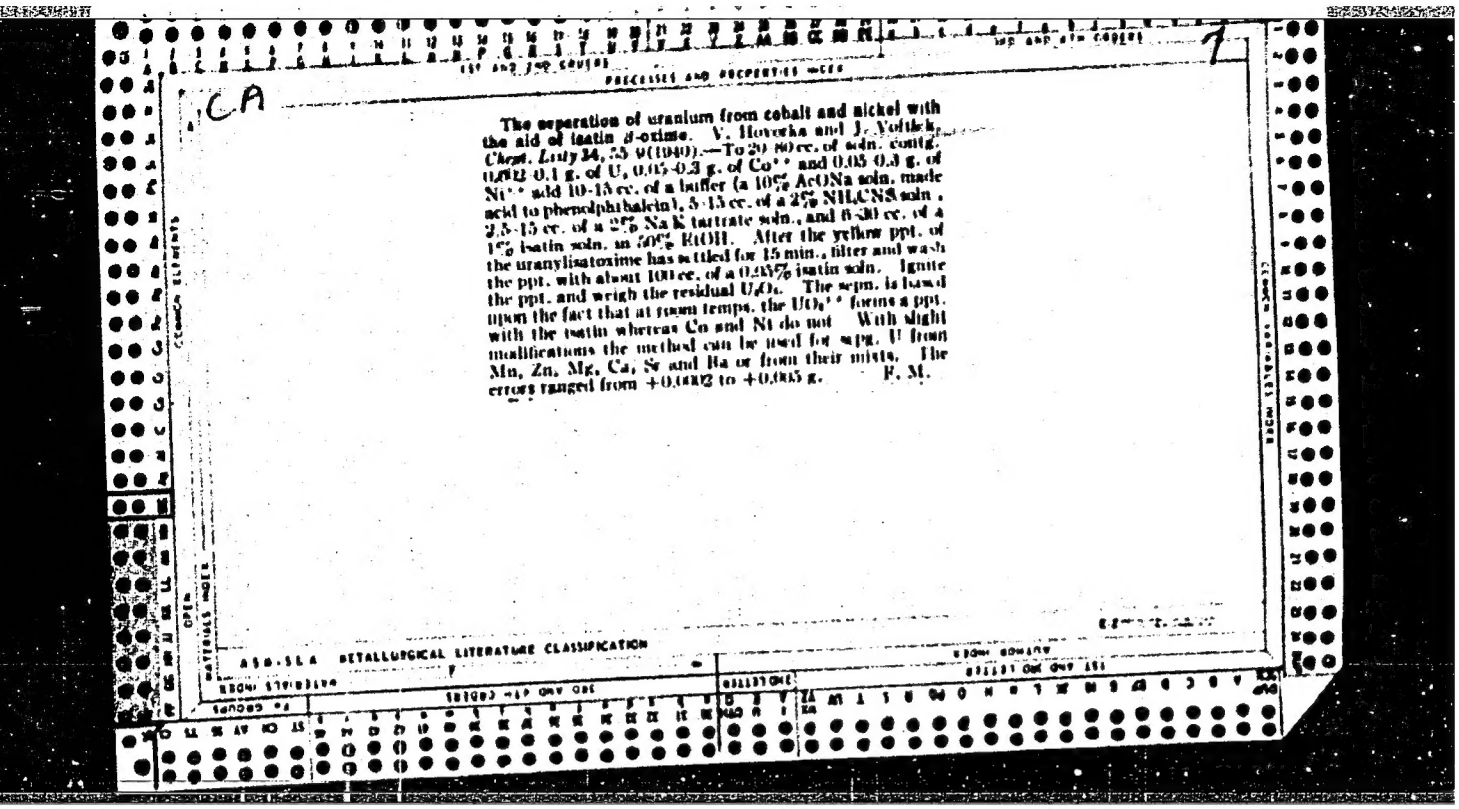
Hydrazide of 12-hydroxystearic (acid) and some of its derivatives. J. Vaisek. *Collection Czechoslov. Chem. Communications* 5, [illegible].—12-Hydroxystearic acid, heated on a water bath for 12 hrs. with $N_2H_4 \cdot H_2O$, gave $C_6H_{13}CH(OH)(CH_2)_{10}CONHNH_2$ (I), m. 115.5–16.5°. I, treated with HCl gas, gave the HCl salt, m. 102.5°; warmed with a slight excess of AcCl, it gave $C_6H_{13}CH(OH)(CH_2)_{10}CONHNHAc$, m. 141.5°; when refluxed with Ac_2O for 15 min. it gave $C_6H_{13}CH(OAc)(CH_2)_{10}CONHNHAc$. I (2 g.) added slowly to I (12 g.) in EtOH and then treated with 6 g. mole of I at once gave $[C_6H_{13}CH(OH)(CH_2)_{10}CONH]_2$, m. 153.4°. J. White



CA

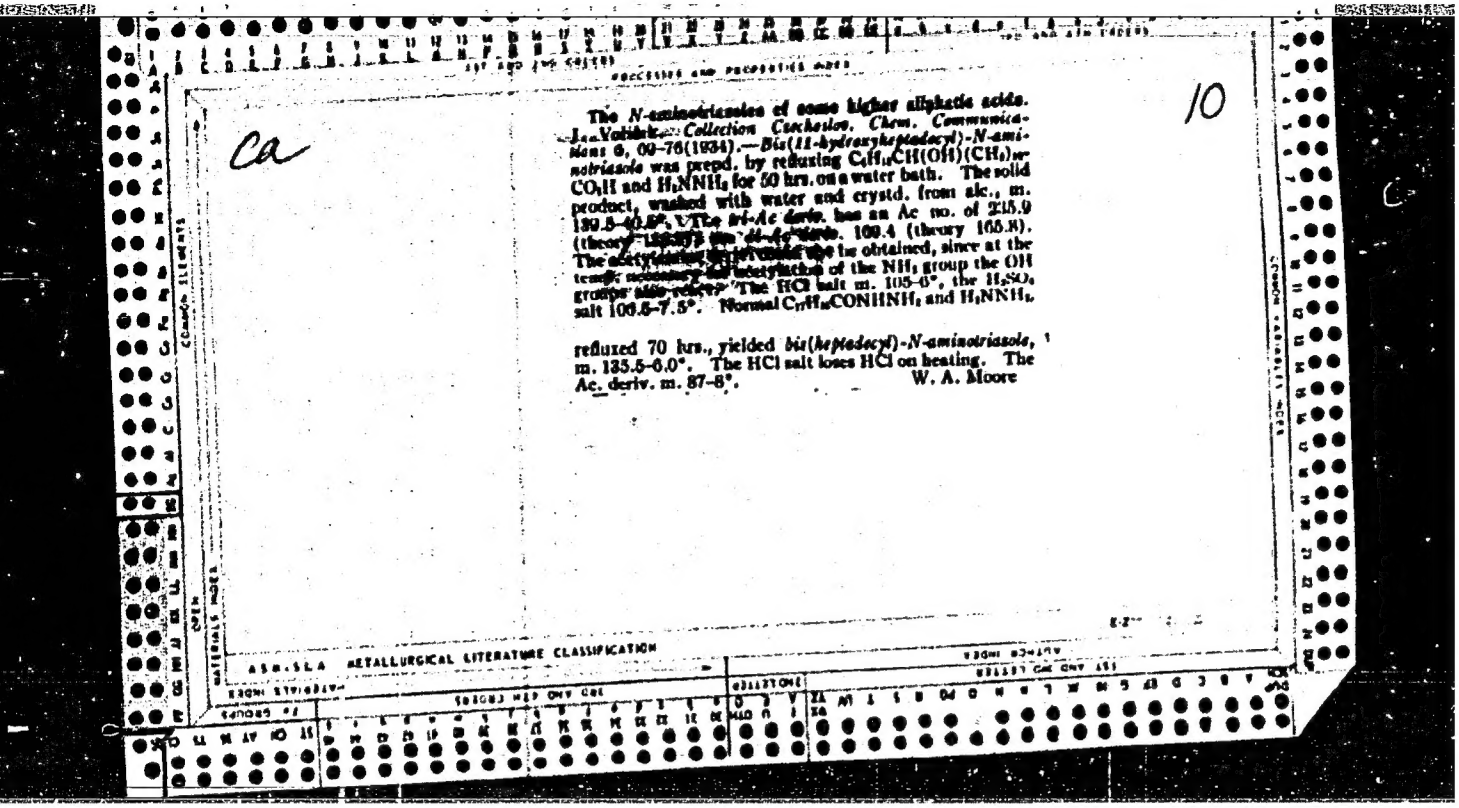
10

Hydrazide of 12-hydroxystearic (acid) and some of its derivatives. I. Yoritsk. Collection Czechoslov. Chem. Communications 5, 466-81(1933).—12-Hydroxystearic acid, heated on a water bath for 12 hrs. with $N_2H_4.H_2O$, gave $C_5H_{11}CH(OH)(CH_2)_{10}CONHNH_2$ (I), m. 115.5-16.5°. I, treated with HCl gas, gave the HCl salt, m. 102-3°; warmed with a slight excess of Ac_2O, it gave $C_5H_{11}CH(OH)(CH_2)_{10}CONHNHAc$, m. 144-5°; when refluxed with Ac_2O for 15 min. it gave $C_5H_{11}CH(OAc)(CH_2)_{10}CONHNHAc$. I (2 g.) added slowly to I (12 g.) in EtOH and then treated with 6 g. more of I at once gave $[C_5H_{11}CH(OH)(CH_2)_{10}CONH]_2$, m. 153-4°. J. White



CA

The separation of uranium from cobalt and nickel with the aid of isatin β-oxime. V. Hovorka and J. Voříšek, *Chem. Listy* 34, 55-9 (1940).—To 20-80 cc. of soln. contg. 0.012-0.1 g. of U, 0.05-0.3 g. of Co^{++} and 0.05-0.3 g. of Ni^{++} add 10-15 cc. of a buffer (a 10% AcONa soln. made acid to phenolphthalein), 5-15 cc. of a 2% NH_4CNS soln., 2.5-15 cc. of a 2% Na K tartrate soln., and 6-30 cc. of a 1% isatin soln. in 50% EtOH. After the yellow ppt. of the uranylisatoxime has settled for 15 min., filter and wash the ppt. with about 100 cc. of a 0.05% isatin soln. Ignite the ppt. and weigh the residual U_3O_8. The sepn. is based upon the fact that at room temps. the UO_2^{++} forms a ppt. with the isatin whereas Co and Ni do not. With slight modifications the method can be used for sepg. U from Mn, Zn, Mg, Ca, Sr and Ba or from their mixts. The errors ranged from +0.0002 to +0.005 g. F. M.

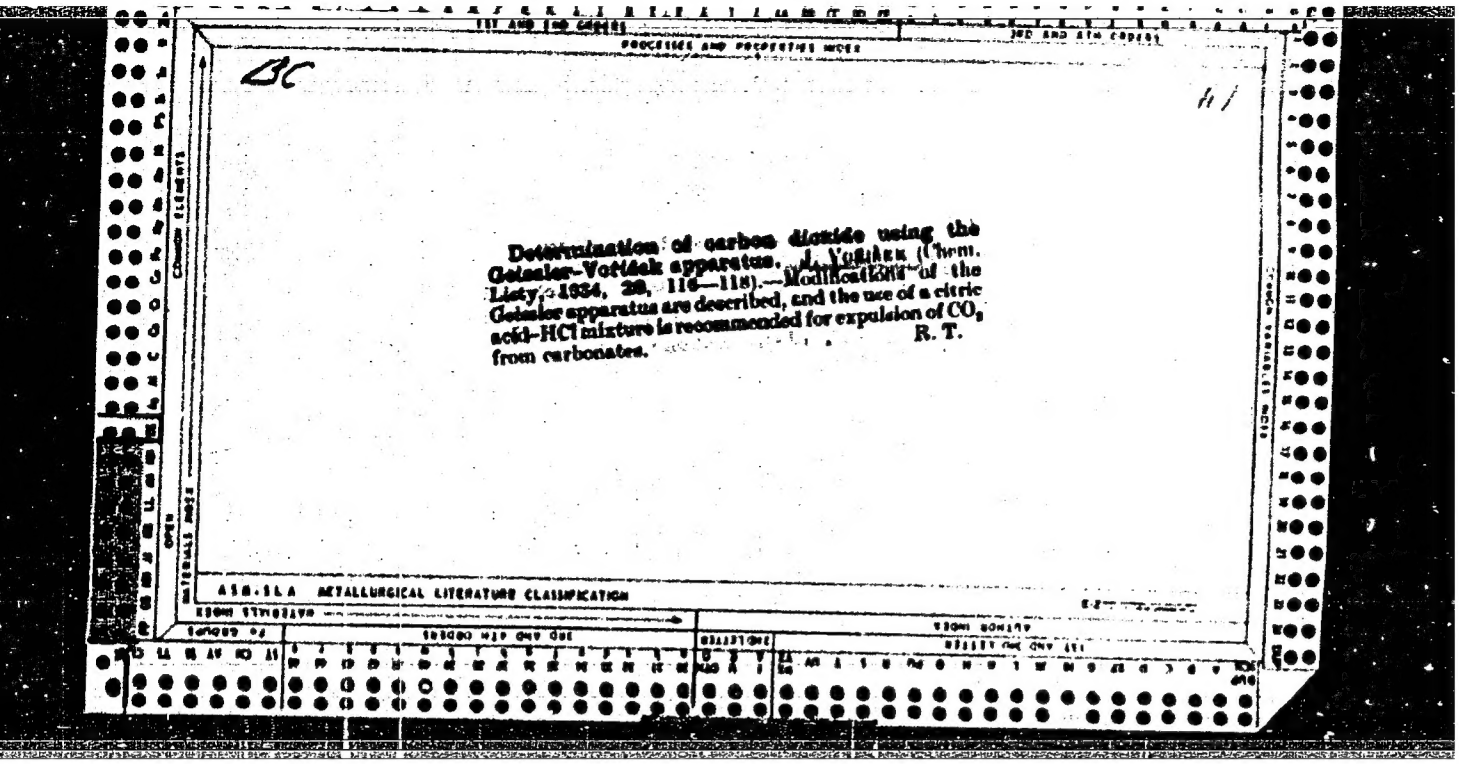


Ca

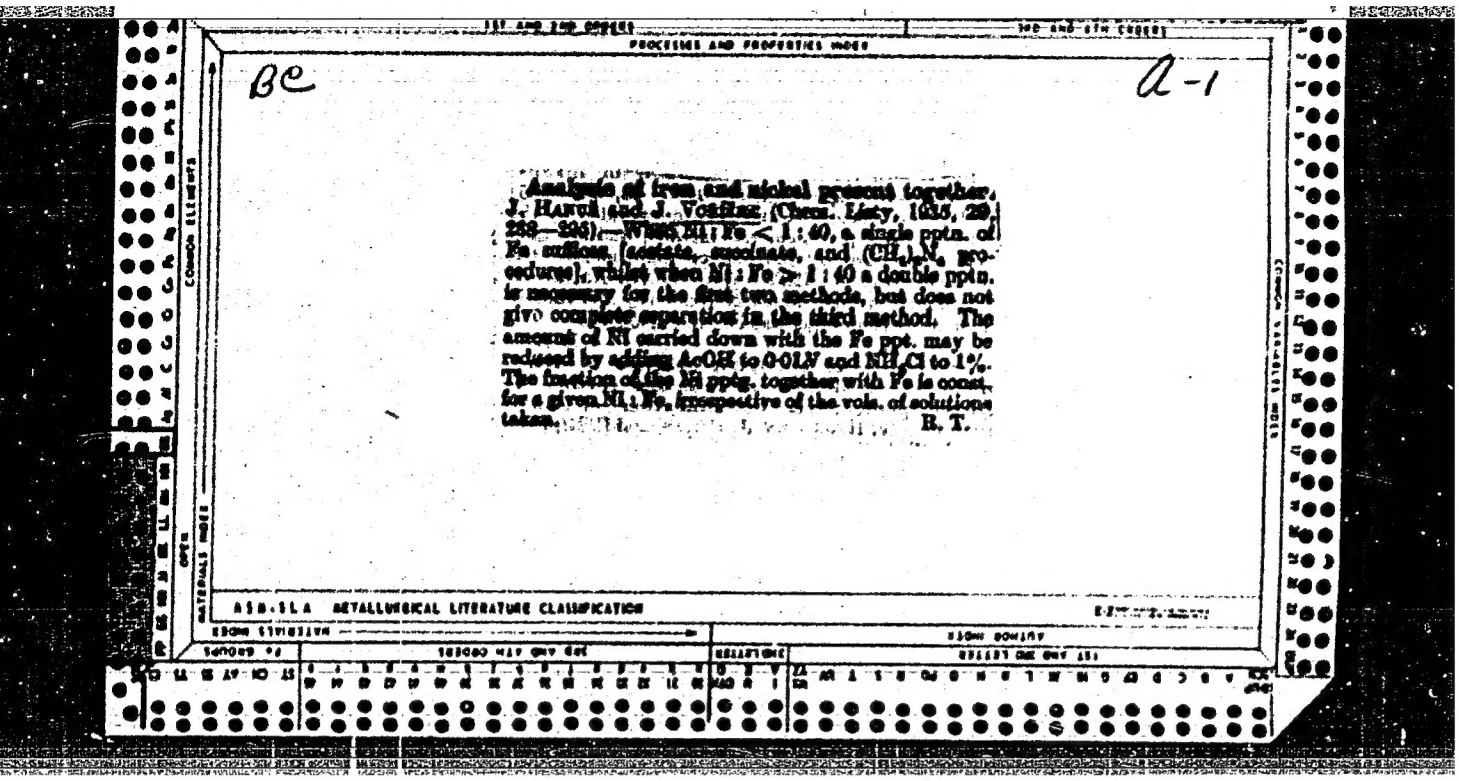
10

The *N*-aminotriazoles of some higher aliphatic acids. J. Volbirk. *Collection Czechoslov. Chem. Communications* 6, 69–76(1934).—*Bis(11-hydroxyheptadecyl)-N-aminotriazole* was prepd. by refluxing $C_6H_{13}CH(OH)(CH_2)_{10}CO_2H$ and H_2NNH_2 for 50 hrs. on a water bath. The solid product, washed with water and crystd. from alc., m. 139.5–40.5°, VN 6; *tri-Ac deriv.* has an Ac no. of 215.9 (theory 189.3); *di-Ac deriv.* 169.4 (theory 165.8). The acetylation could not be obtained, since at the temp. necessary for acetylation of the NH_2 group the OH groups also react. The HCl salt m. 105–6°, the H_2SO_4 salt 100.5–7.5°. Normal $C_{17}H_{35}CONHNH_2$ and H_2NNH_2 refluxed 70 hrs., yielded *bis(heptadecyl)-N-aminotriazole*, m. 135.5–6.0°. The HCl salt loses HCl on heating. The Ac. deriv. m. 87–8°.

W. A. Moore



Determination of carbon dioxide using the Geissler-Votiček apparatus. J. Votiček (Chem. Listy, 1934, 28, 116—118).—Modifications of the Geissler apparatus are described, and the use of a citric acid–HCl mixture is recommended for expulsion of CO_2 from carbonates. R. T.



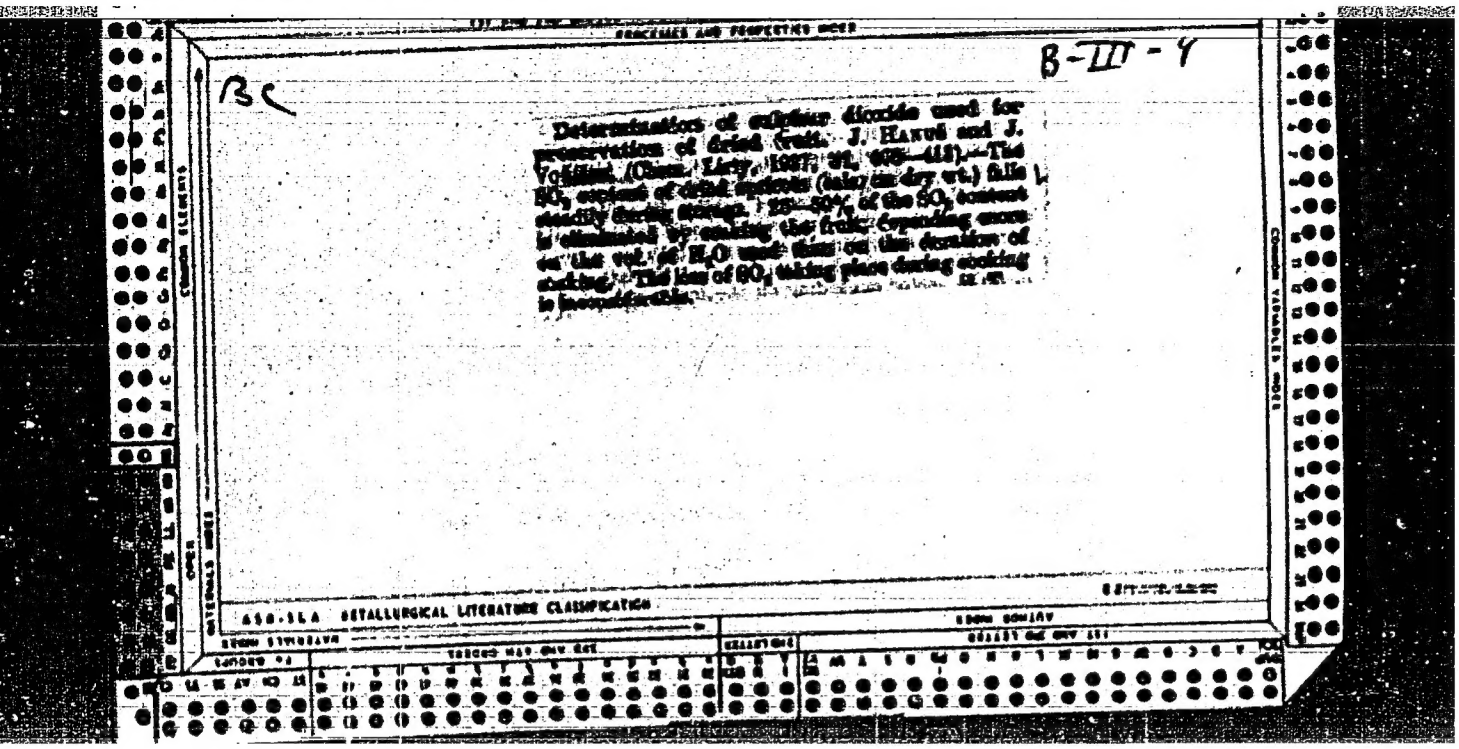
Be

a-1

Analysis of iron and nickel present together. J. Harvil and J. Vostřez. (Chem. Listy, 1935, 29, 293—296).—When Ni : Fe < 1 : 40, a single pptn. of Fe sulfosal. [acetate, succinate, and $(CH_2)_6N_4$ procedure], whilst when Ni : Fe > 1 : 40 a double pptn. is necessary for the first two methods, but does not give complete separation in the third method. The amount of Ni carried down with the Fe ppt. may be reduced by adding AcOH to 0·01*N* and NH_4Cl to 1%. The fraction of the Ni ppte. together with Fe is const. for a given Ni : Fe, irrespective of the vols. of solutions taken.

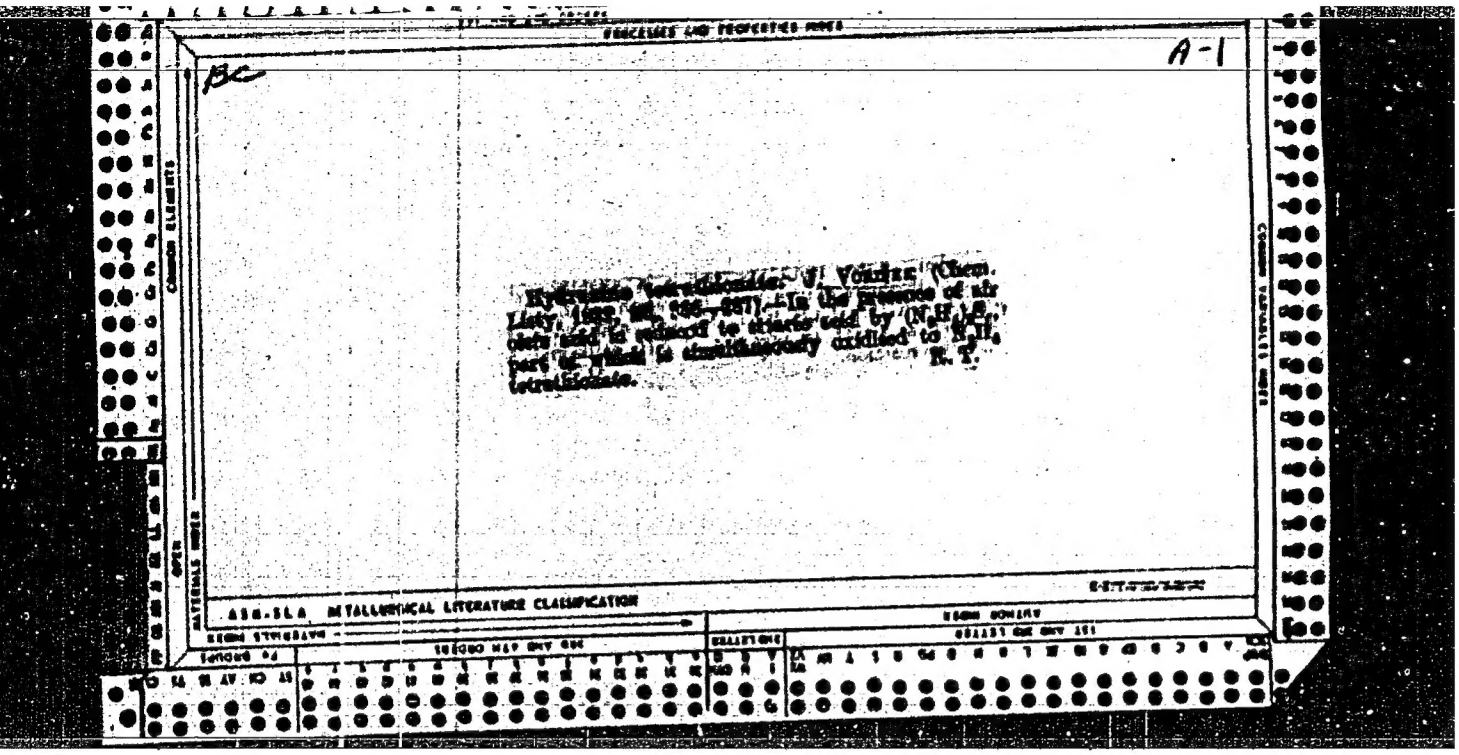
B. T.

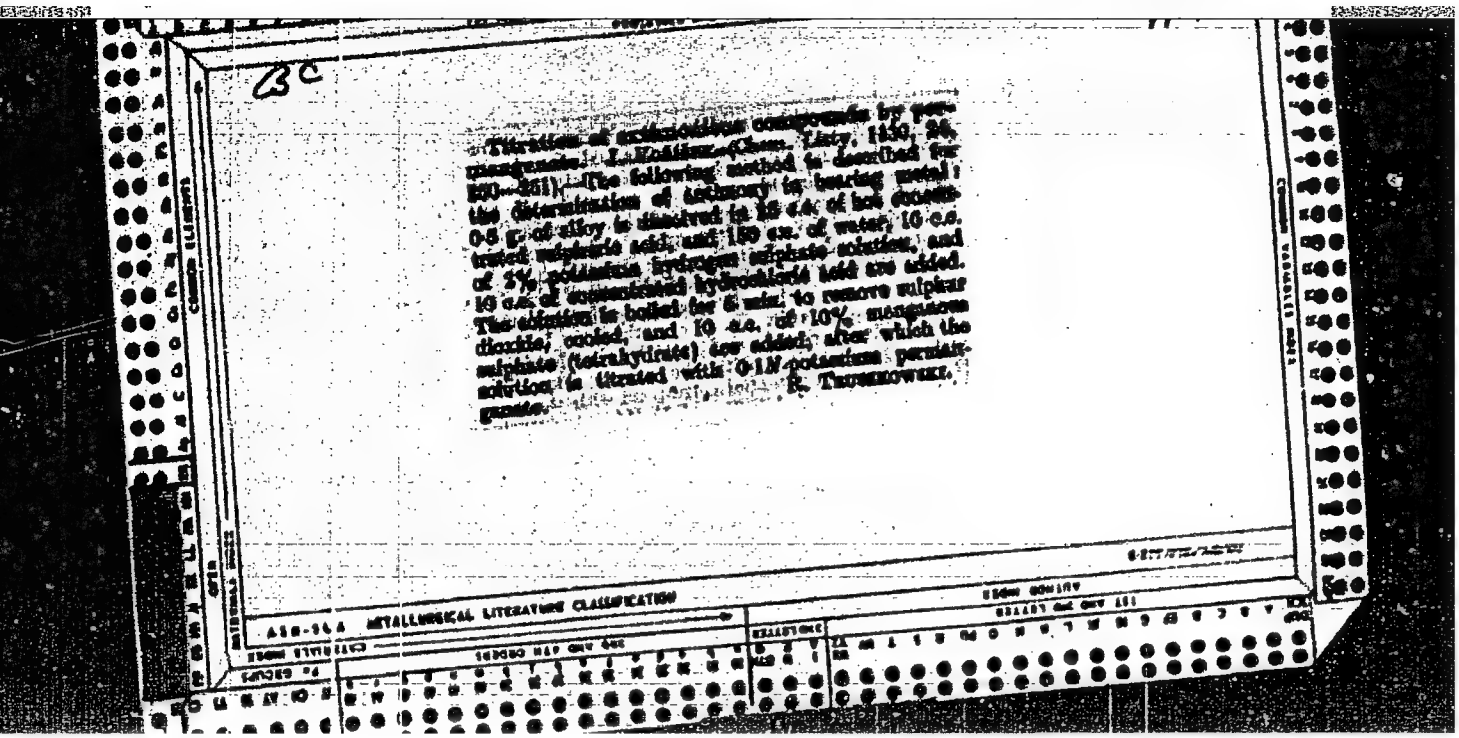
A 38.5 LA METALLURGICAL LITERATURE CLASSIFICATION



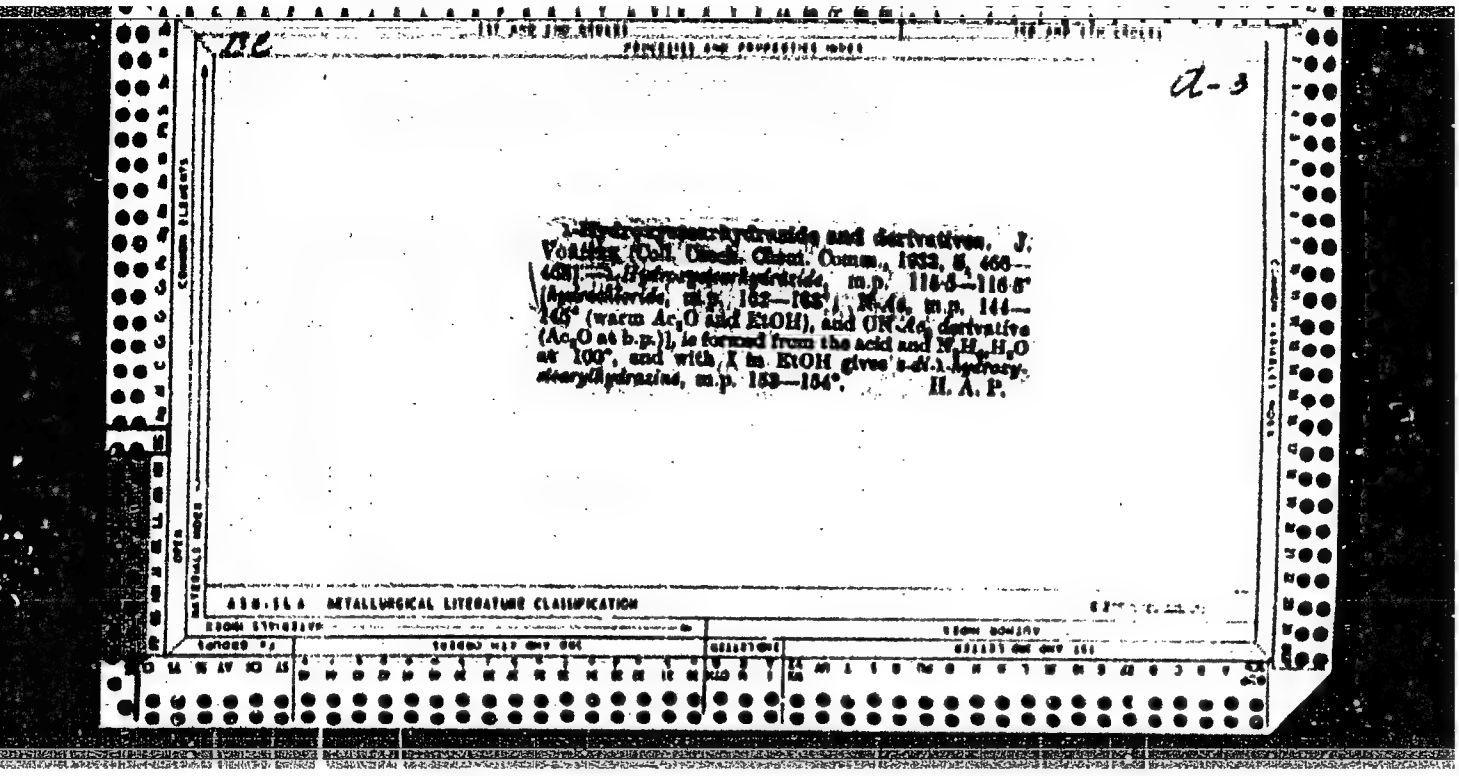
B-III-4

Determination of sulphur dioxide used for preservation of dried fruit. J. HAJNÝ and J. VOŘÍŠEK (Chem. Listy, 1957, 51, 409—413).—The SO_2 content of dried apricots (also on dry wt.) falls steadily during storage. 15—50% of the SO_2 content is eliminated by soaking the fruit. Expanding more or less vol. of H_2O must then on the duration of soaking. The loss of SO_2 taking place during cooking is inconsiderable.





Titration of oxidisable compounds by permanganate. I. Rodillon. (Chem. Listy, 1930, 24, 350—351).—The following method is described for the determination of antimony in bearing metal: 0·5 g. of alloy is dissolved in 25 c.c. of hot concentrated sulphuric acid, and 150 c.c. of water, 10 c.c. of 5% potassium hydrogen sulphate solution, and 10 c.c. of concentrated hydrochloric acid are added. The solution is boiled for 5 min. to remove sulphur dioxide, cooled, and 10 c.c. of 10% manganous sulphate (tetrahydrate) are added, after which the solution is titrated with 0·1*N*-potassium permanganate. R. TRUSZKOWSKI.



DC

A-3

[illegible]-hydrazide and derivatives. J. Voerkelius (Coll. Czech. Chem. Comm., 1932, 4, 466—468).—*Hydroxyacetylhydrazide*, m.p. 116·5—116·8° (*hydrochloride*, m.p. 162—163°), *NAc* derivative, m.p. 144—145° (warm Ac_2O and EtOH), and *ON.Ac* derivative (Ac_2O at b.p.)], is formed from the acid and N_2H_4,H_2O at 100°, and with I in EtOH gives *α-dl-hydroxystearylhydrazine*, m.p. 153—154°. H. A. P.

ASLIB METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

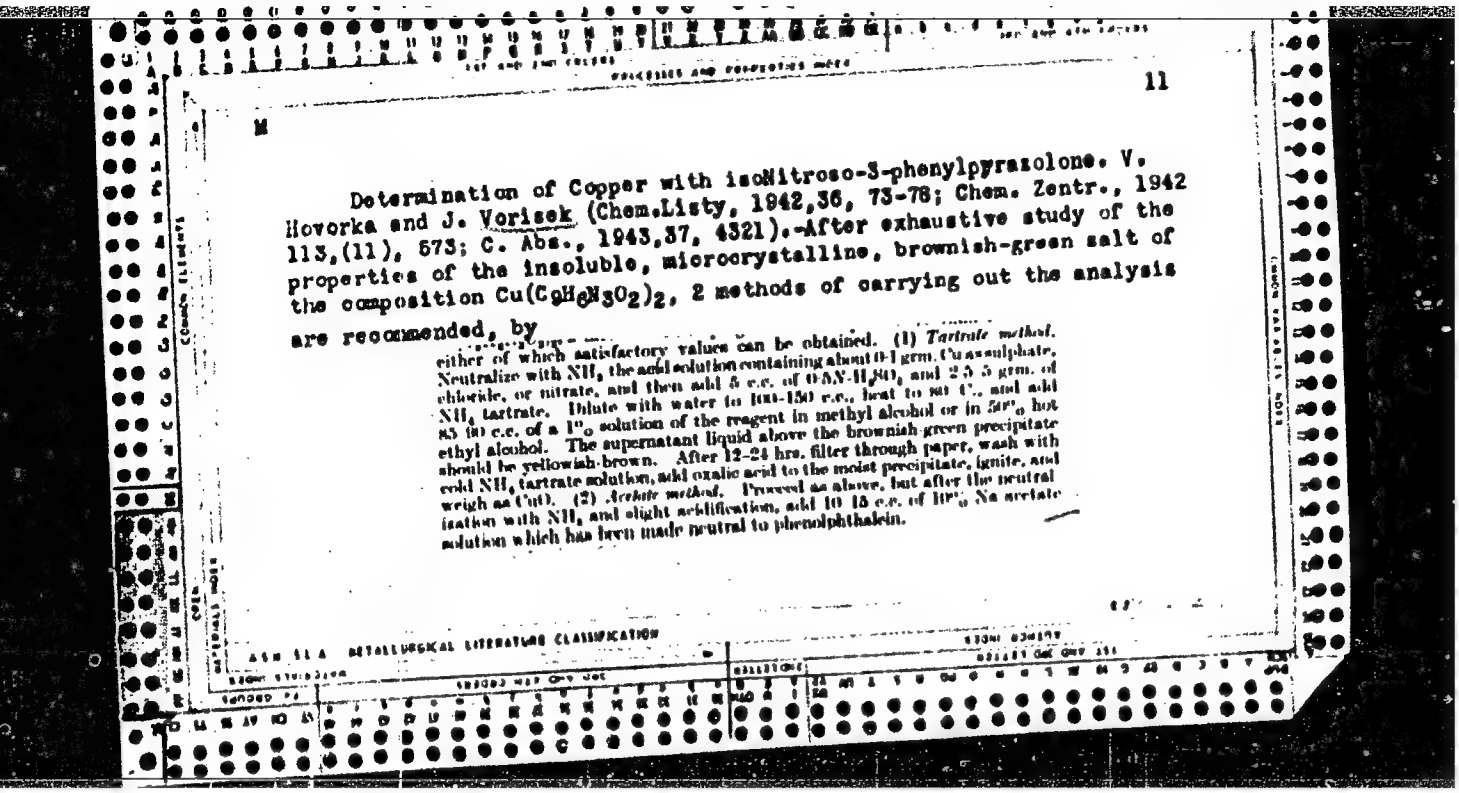
PROCESSES AND PROPERTIES INDEX

CA

7

The determination of carbon dioxide in carbonates with the Geissler-Vollick apparatus.—I. Vollick. *Chem. Listy* 28, 116-18(1934).—The detn. of CO_2 by means of an alkalimeter is described and discussed. F. M.

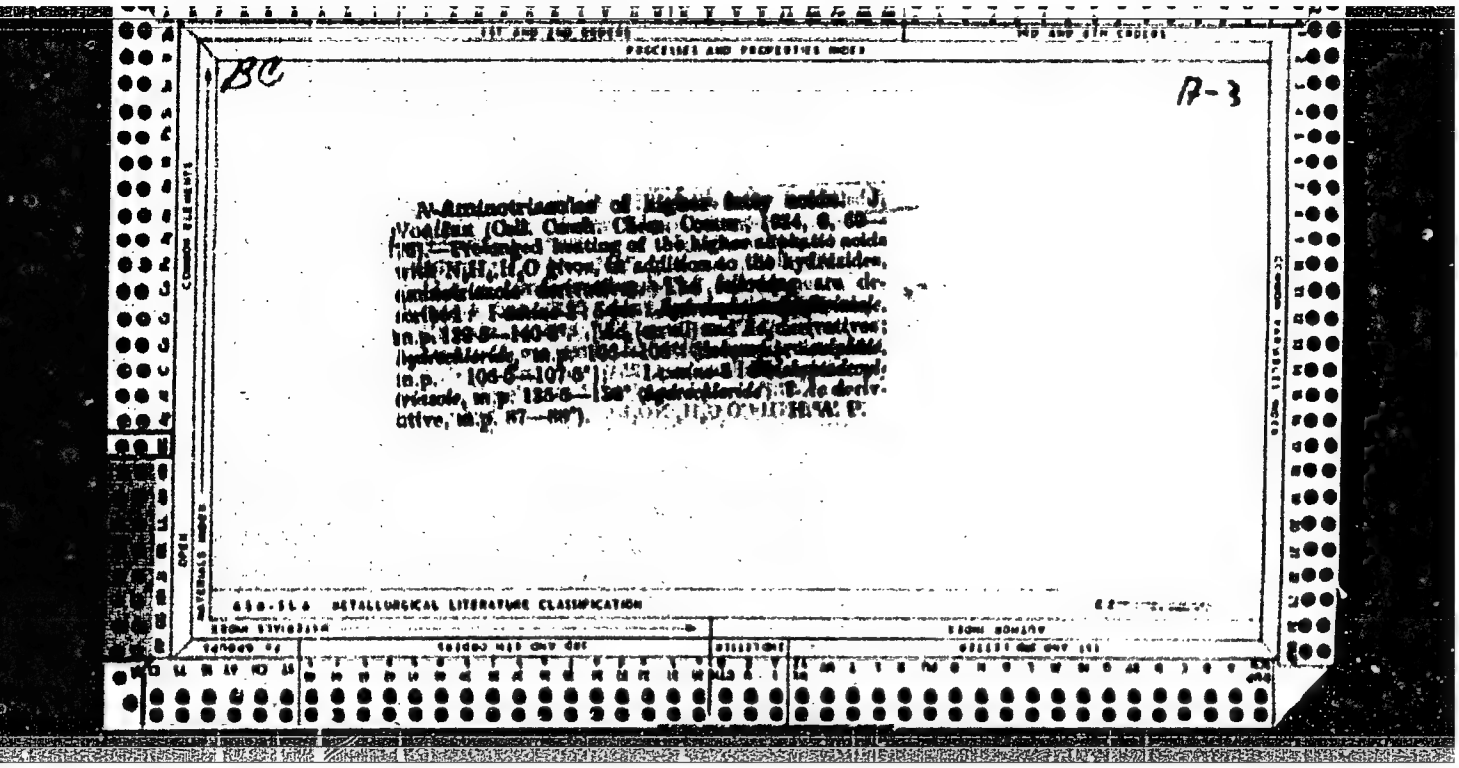
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

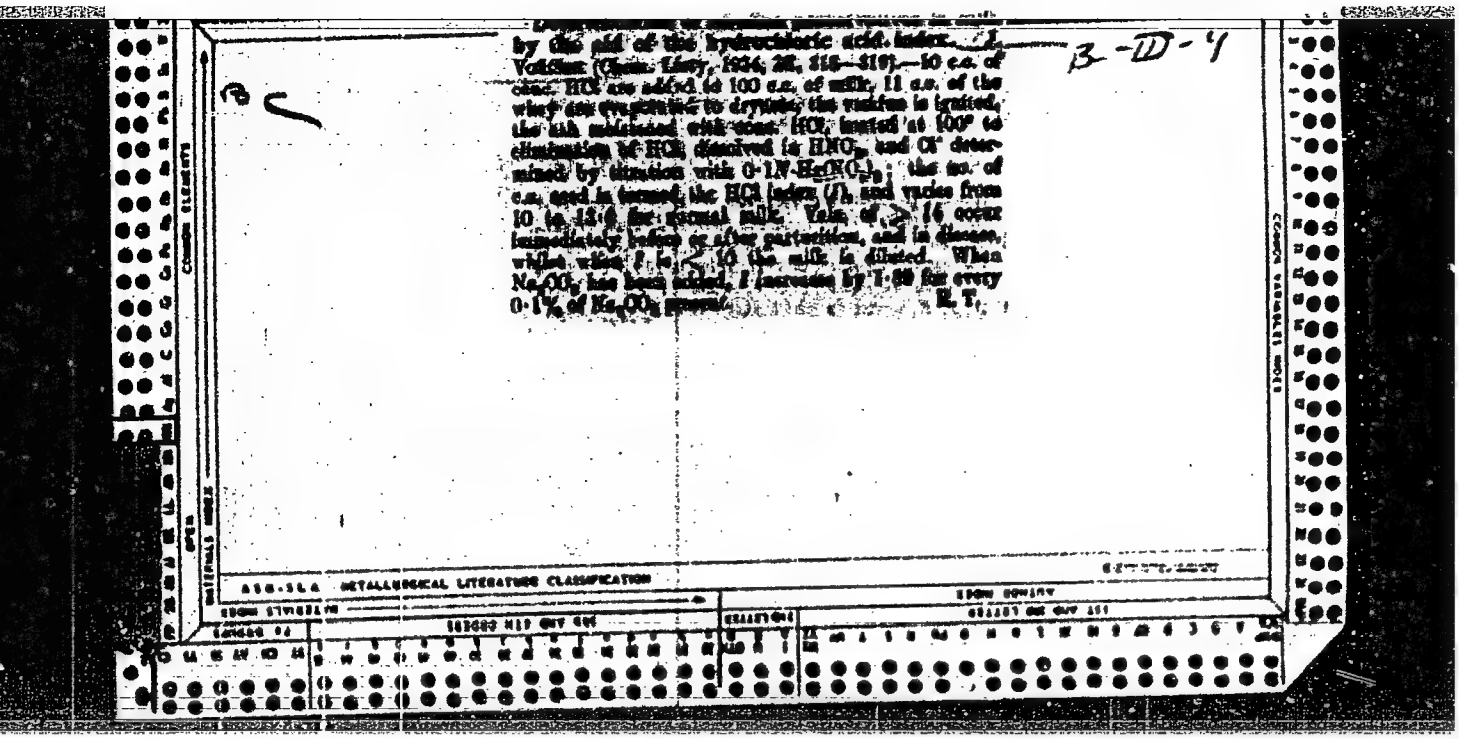


11

Determination of Copper with isoNitroso-3-phenylpyrazolone. V. Hovorka and J. Vorisek (Chem.Listy, 1942,36, 73-78; Chem. Zentr., 1942 113,(11), 573; C. Abs., 1943,37, 4321).-After exhaustive study of the properties of the insoluble, microcrystalline, brownish-green salt of the composition $Cu(C_9H_9N_3O_2)_2$, 2 methods of carrying out the analysis are recommended, by

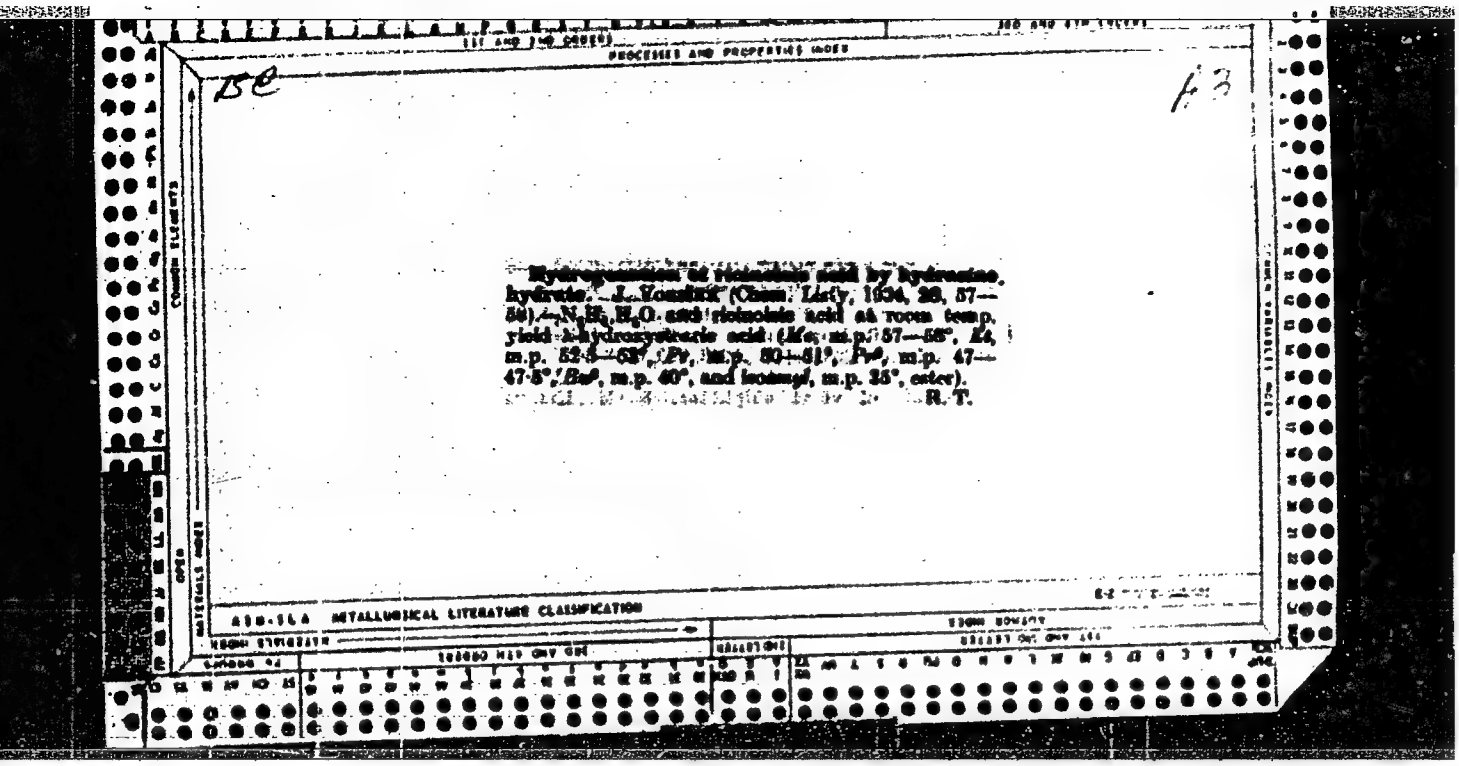
either of which satisfactory values can be obtained. (1) *Tartrate method.* Neutralize with NH_3 the acid solution containing about 0·1 grm. Cu as sulphate, chloride, or nitrate, and then add 5 c.c. of 0·4N-H_2SO_4, and 2·5 grm. of NH_4 tartrate. Dilute with water to 100-150 c.c., heat to 80°, and add 85 (0 c.c. of a 1% solution of the reagent in methyl alcohol or in 50% hot ethyl alcohol. The supernatant liquid above the brownish-green precipitate should be yellowish-brown. After 12-24 hrs. filter through paper, wash with cold NH_4 tartrate solution, add oxalic acid to the moist precipitate, ignite, and weigh as CuO. (2) *Acetate method.* Proceed as above, but after the neutralisation with NH_3 and slight acidification, add 10-15 c.c. of 10% Na acetate solution which has been made neutral to phenolphthalein.



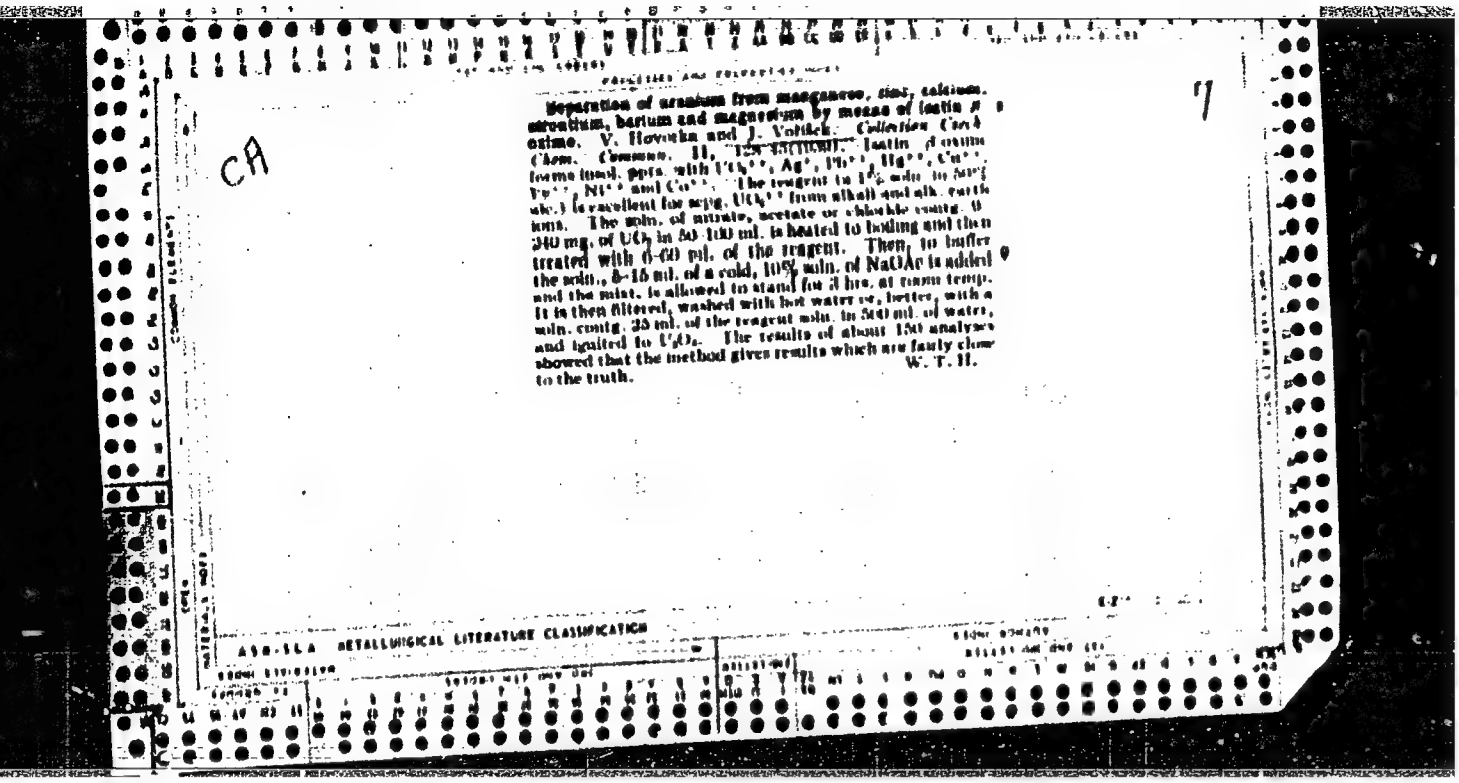


by the pH of the hydrochloric acid index. J. Volhard (Chem. Ztg., 1924, 48, 818—819).—10 c.c. of conc. HCl are added to 100 c.c. of milk, 11 c.c. of the whey are evaporated to dryness, the residue is ignited, the ash moistened with conc. HCl, heated at 100° to elimination of CO_2, dissolved in HNO_3, and Cl' determined by titration with 0·1*N*-$Hg(NO_3)_2$; the no. of c.c. used is termed the HCl index (*I*), and varies from 10 to 13·6 for normal milk. Value of *I* > 16 occurs immediately before or after parturition, and in disease, whilst when *I* is < 10 the milk is diluted. When Na_2CO_3 has been added, *I* increases by 1·69 for every 0·1% of Na_2CO_3 present. R. T.

B-D-4



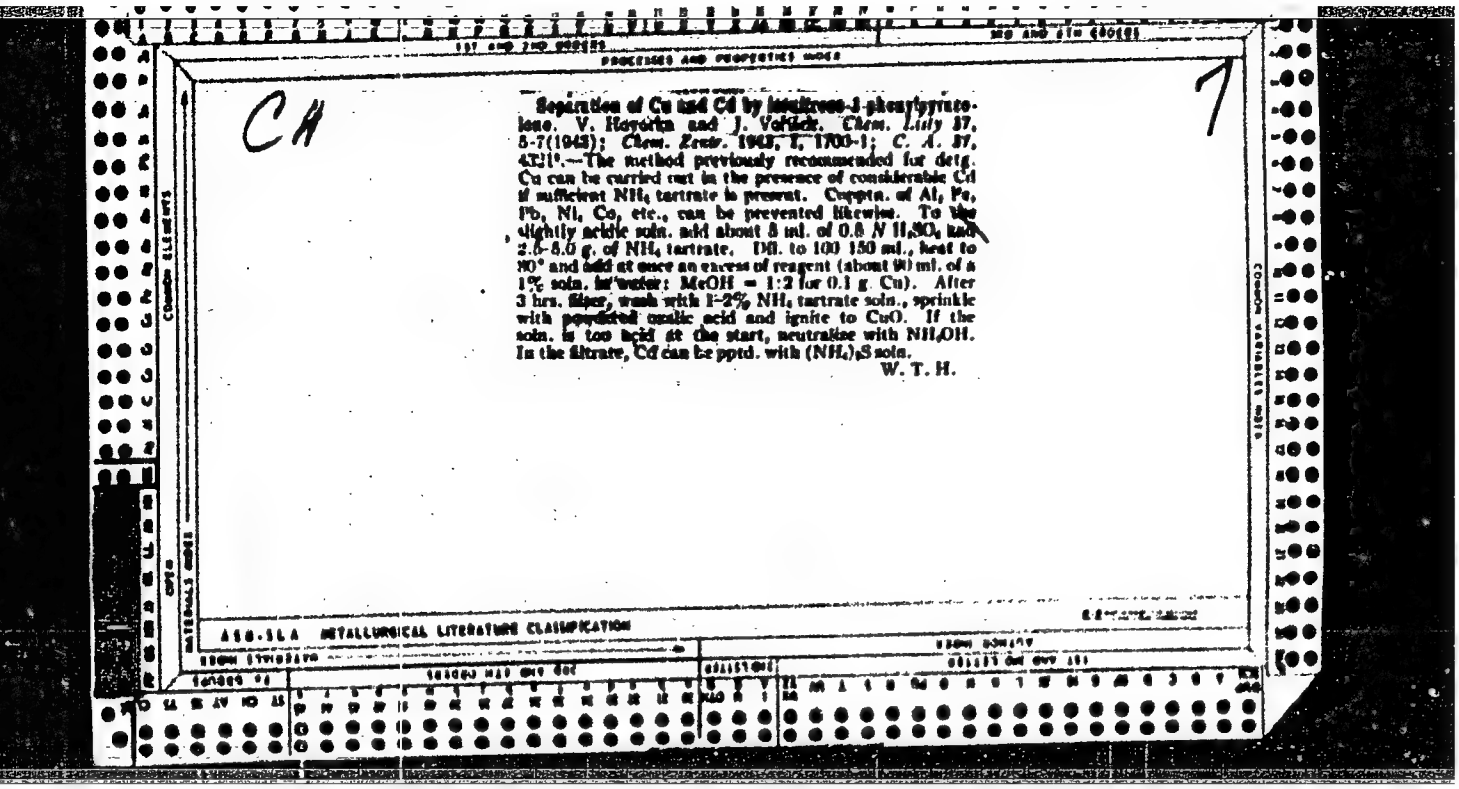
Hydrogenation of ricinoleic acid by hydrazine hydrate. J. Vonášek (Chem. Listy, 1934, 28, 57—59).—N_2H_4,H_2O and ricinoleic acid at room temp. yield 1-hydroxystearic acid (*Me*, m.p. 57—58°, *Et*, m.p. 52·5—53°, *Pr*, m.p. 50—51°, *Pr*$^{\beta}$, m.p. 47—47·5°, *Bu*$^{\beta}$, m.p. 40°, and *isoamyl*, m.p. 35°, ester). R. T.



CA

Separation of uranium from manganese, zinc, calcium, strontium, barium and magnesium by means of lactic acid esters. V. Hovorka and J. Volfová. *Collection Czech. Chem. Commun.* 11, [illegible]. Lactic acid esters form insol. ppts. with UO_2^{++}, Ag^+, Pb^{++}, Hg^{++}, Cu^{++}, Fe^{++}, Ni^{++} and Co^{++}. The reagent is [illegible] ester (Et ester) is excellent for sepg. UO_2^{++} from alkali and alk. earth ions. The soln. of nitrate, acetate or chloride contg. 0.240 mg. of UO_2 in 50–100 ml. is heated to boiling and then treated with 0–60 pil. of the reagent. Then, to buffer the soln., 8–15 ml. of a cold, 10% soln. of NaOAc is added and the mixt. is allowed to stand for 2 hrs. at room temp. It is then filtered, washed with hot water or, better, with a soln. contg. 25 ml. of the reagent soln. in 500 ml. of water, and ignited to U_3O_8. The results of about 150 analyses showed that the method gives results which are fairly close to the truth.

W. T. H.

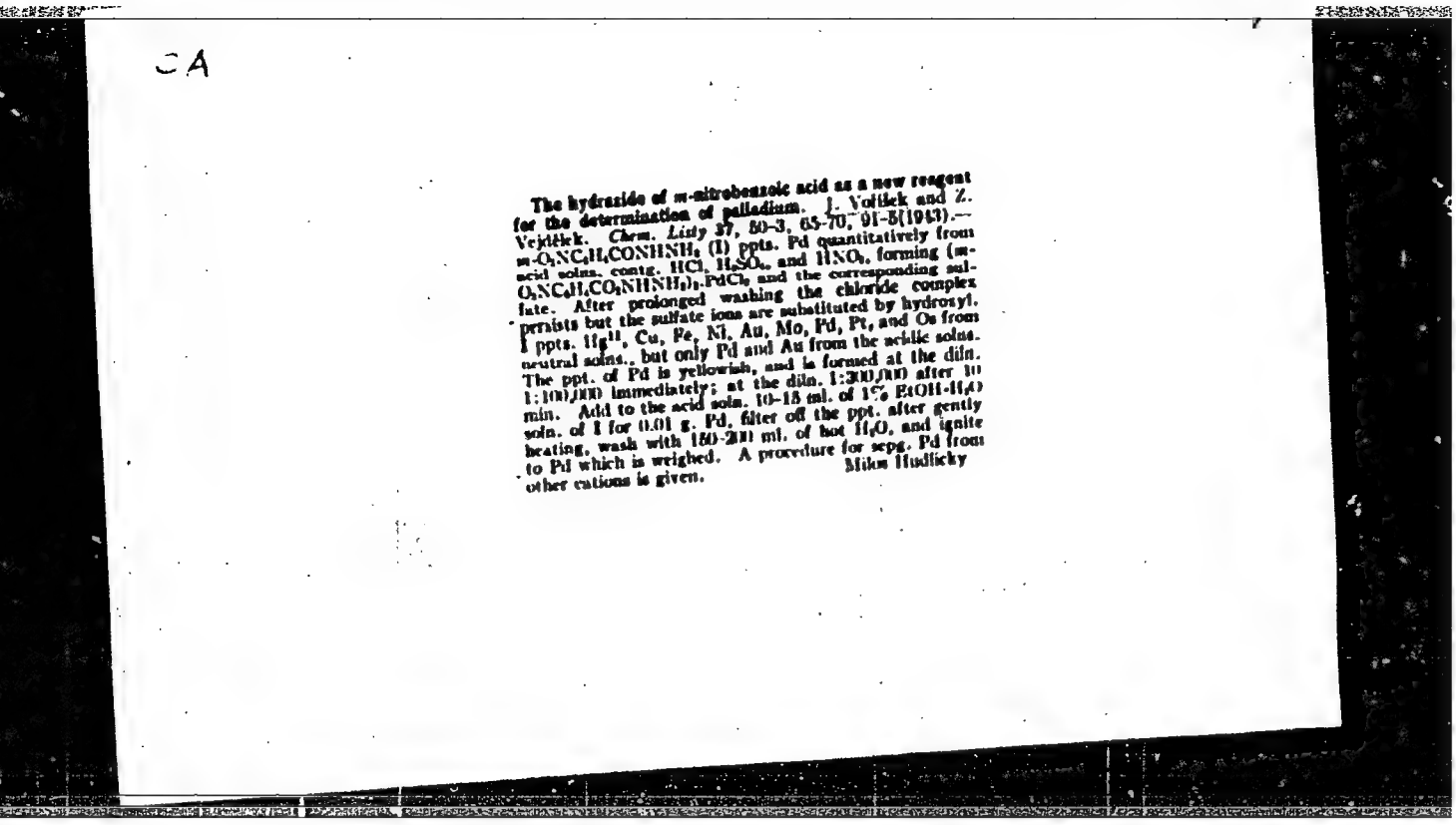


CH

7

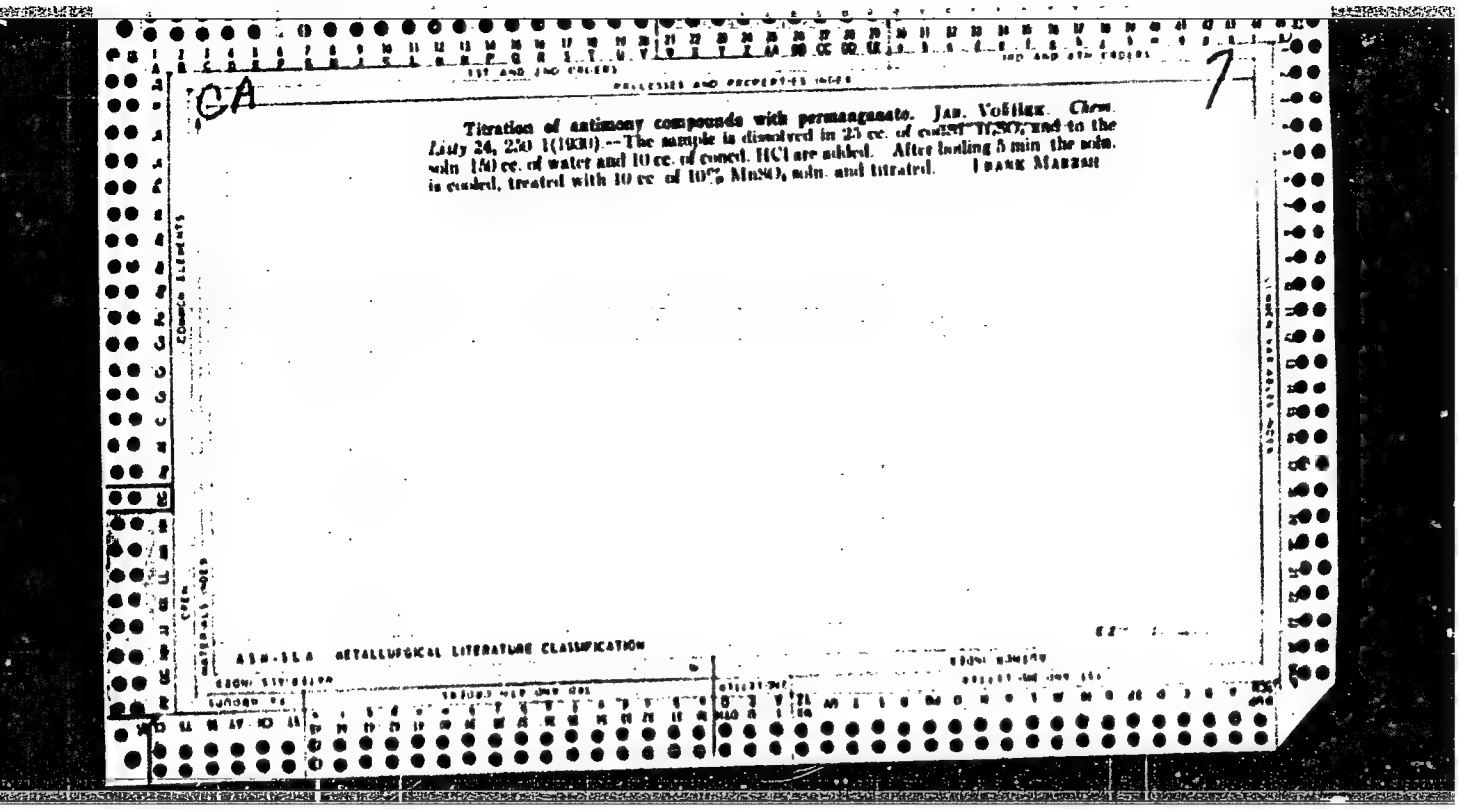
Separation of Cu and Cd by laudanosine-1-phenylpyruvate-ions. V. Hoyerka and J. Vošický. *Chem. Listy* 37, 5-7(1943); *Chem. Zentr.* 1943, I, 1700-1; *C. A.* 37, 4731°.—The method previously recommended for detg. Cu can be carried out in the presence of considerable Cd if sufficient NH_4 tartrate is present. Coppts. of Al, Fe, Pb, Ni, Co, etc., can be prevented likewise. To the slightly acidic soln. add about 5 ml. of 0.5 *N* H_2SO_4 and 2.5–5.0 g. of NH_4 tartrate. Dil. to 100–150 ml., heat to 80° and add at once an excess of reagent (about 30 ml. of a 1% soln. in water: MeOH = 1:2 for 0.1 g. Cu). After 3 hrs. filter, wash with 1–2% NH_4 tartrate soln., sprinkle with powdered oxalic acid and ignite to CuO. If the soln. is too acid at the start, neutralize with NH_4OH. In the filtrate, Cd can be pptd. with $(NH_4)_2S$ soln.

W. T. H.



CA

The hydrazide of *m*-nitrobenzoic acid as a new reagent for the determination of palladium. J. Volfek and Z. Vejdlek. *Chem. Listy* 37, 50-3, 65-70, 91-5(1943).—*m*-$O_2NC_6H_4CONHNH_2$ (I) ppts. Pd quantitatively from acid solns. contg. HCl, H_2SO_4, and HNO_3, forming (*m*-$O_2NC_6H_4CONHNH_2)_2$·$PdCl_2$ and the corresponding sulfate. After prolonged washing the chloride complex persists but the sulfate ions are substituted by hydroxyl. I ppts. Hg^{II}, Cu, Fe, Ni, Au, Mo, Pd, Pt, and Os from neutral solns., but only Pd and Au from the acidic solns. The ppt. of Pd is yellowish, and is formed at the dilns. 1:100,000 immediately; at the dilns. 1:300,000 after 10 min. Add to the acid soln. 10–15 ml. of 1% EtOH-H_2O soln. of I for 0.01 g. Pd, filter off the ppt. after gently heating, wash with 180–200 ml. of hot H_2O, and ignite to Pd which is weighed. A procedure for sepg. Pd from other cations is given. Miloš Hudlický

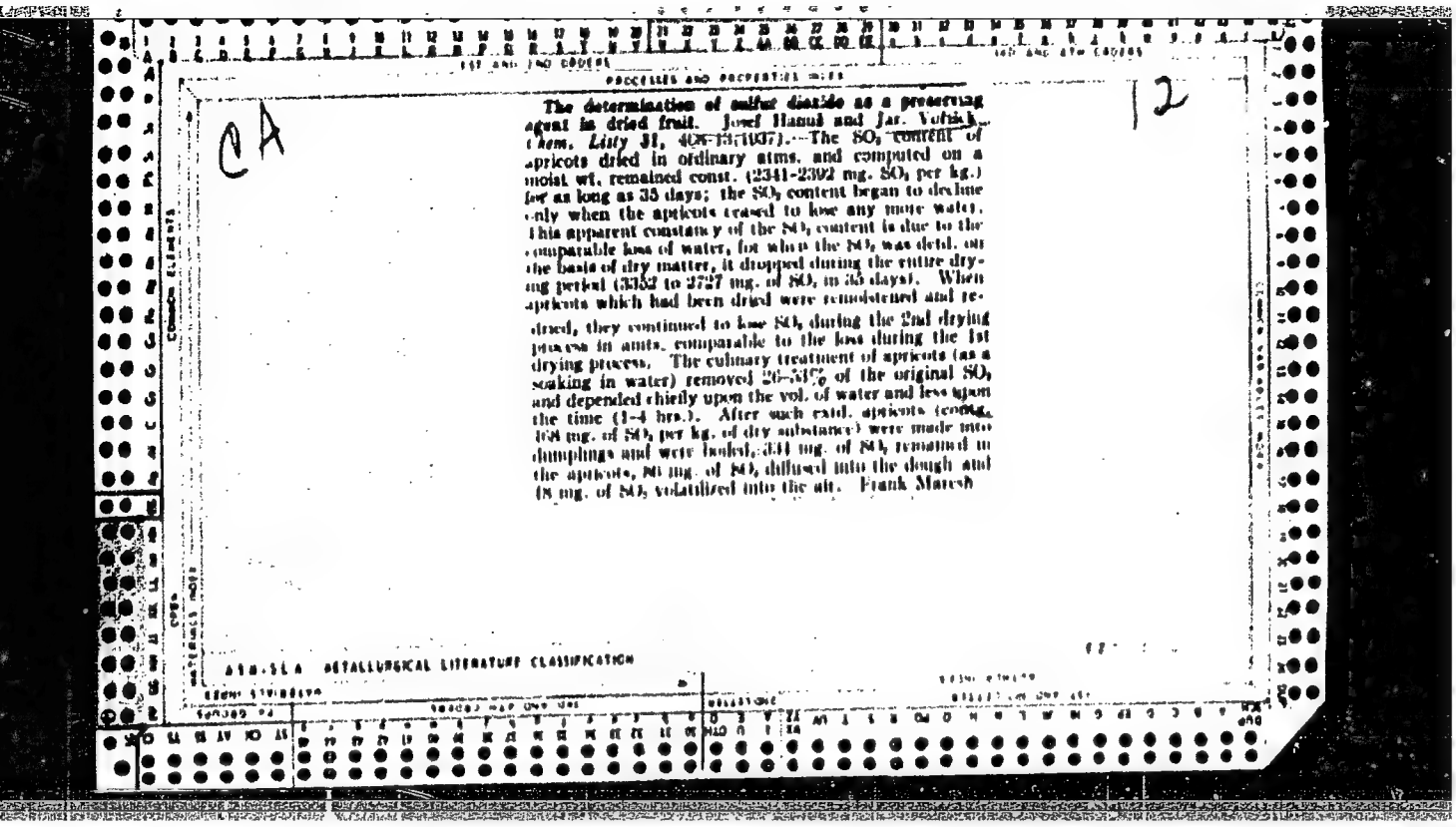


CA

7

Titration of antimony compounds with permanganate. Jan. Vollian. *Chem. Listy* 24, 230 1(1930).—The sample is dissolved in 25 cc. of concd. H_2SO_4 and to the soln. 150 cc. of water and 10 cc. of concd. HCl are added. After boiling 5 min. the soln. is cooled, treated with 10 cc. of 10% $MnSO_4$, soln. and titrated. FRANK MARZAK

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

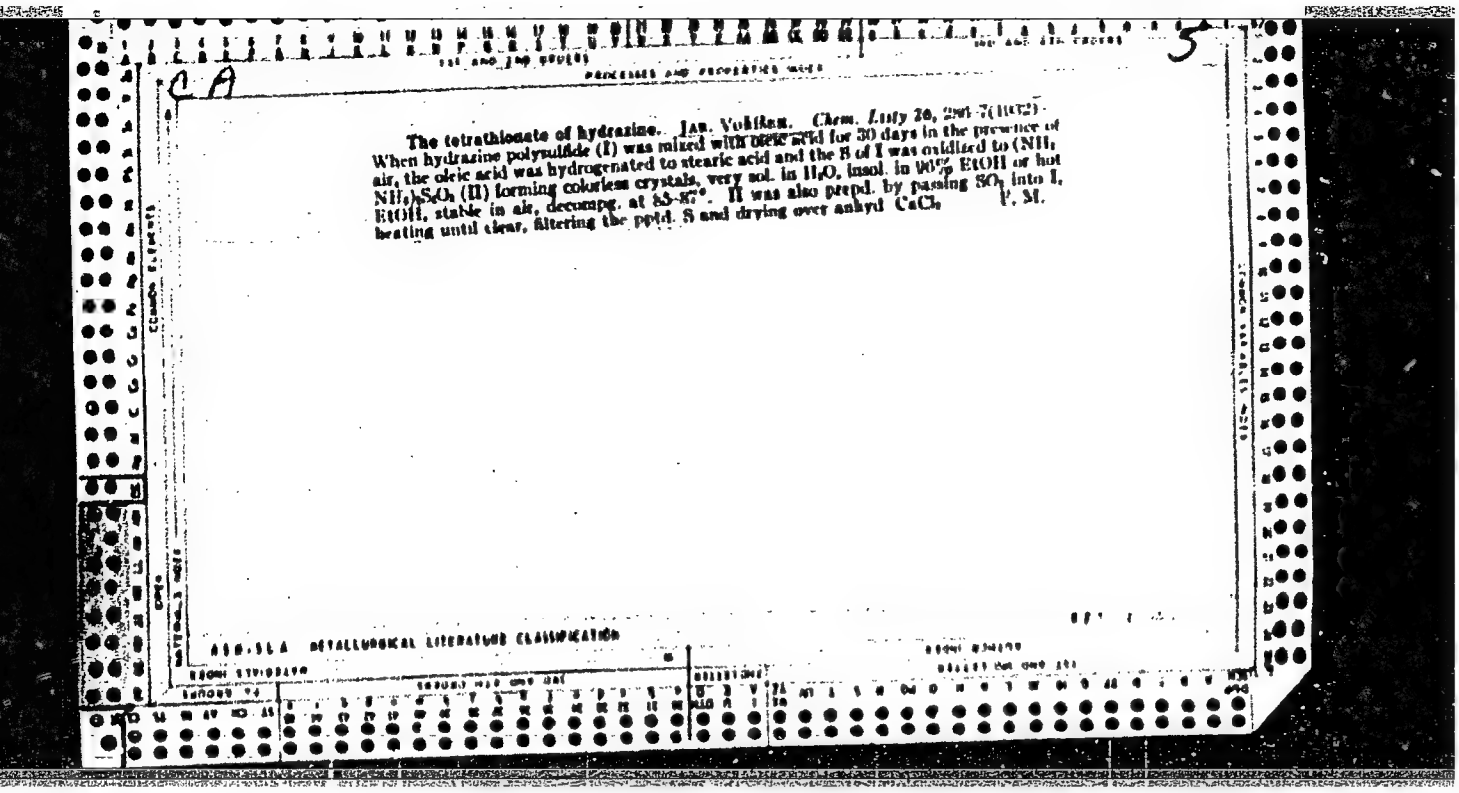


CA

12

The determination of sulfur dioxide as a preserving agent in dried fruit. Josef Hanuš and Jar. Votiský. *Chem. Listy* 31, 405-13(1937).—The SO_2 content of apricots dried in ordinary atms. and computed on a moist wt. remained const. (2341-2392 mg. SO_2 per kg.) for as long as 35 days; the SO_2 content began to decline only when the apricots ceased to lose any more water. This apparent constancy of the SO_2 content is due to the comparable loss of water, for when the SO_2 was detd. on the basis of dry matter, it dropped during the entire drying period (3352 to 2727 mg. of SO_2 in 35 days). When apricots which had been dried were remoistened and redried, they continued to lose SO_2 during the 2nd drying process in amts. comparable to the loss during the 1st drying process. The culinary treatment of apricots (as a soaking in water) removed 26–31% of the original SO_2 and depended chiefly upon the vol. of water and less upon the time (1–4 hrs.). After such extd. apricots (cont'g. 168 mg. of SO_2 per kg. of dry substance) were made into dumplings and were boiled, 31 mg. of SO_2 remained in the apricots, 80 mg. of SO_2 diffused into the dough and 48 mg. of SO_2 volatilized into the air. Frank Marsh

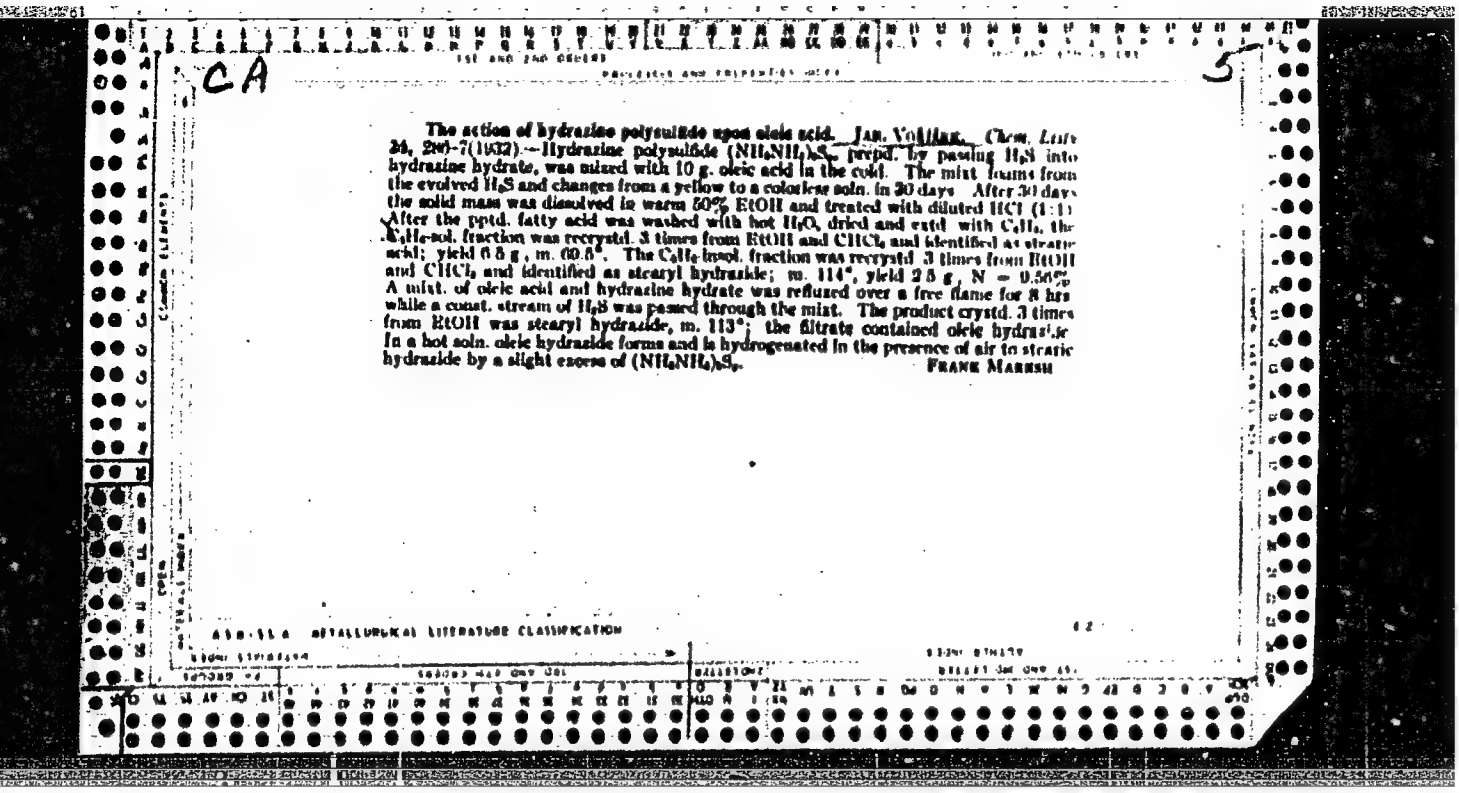
A10-5L4 METALLURGICAL LITERATURE CLASSIFICATION



CA

5

The tetrathionate of hydrazine. Jan. Vohlkan. *Chem. Listy* 26, 297-7(1932). When hydrazine polysulfide (I) was mixed with oleic acid for 30 days in the presence of air, the oleic acid was hydrogenated to stearic acid and the S of I was oxidized to $(NH_4)_2S_4O_6$ (II) forming colorless crystals, very sol. in H_2O, insol. in 90% EtOH or hot EtOH, stable in air, decomps. at 85-87°. II was also prepd. by passing SO_2 into I, heating until clear, filtering the ppted. S and drying over anhyd $CaCl_2$. P. M.



CA

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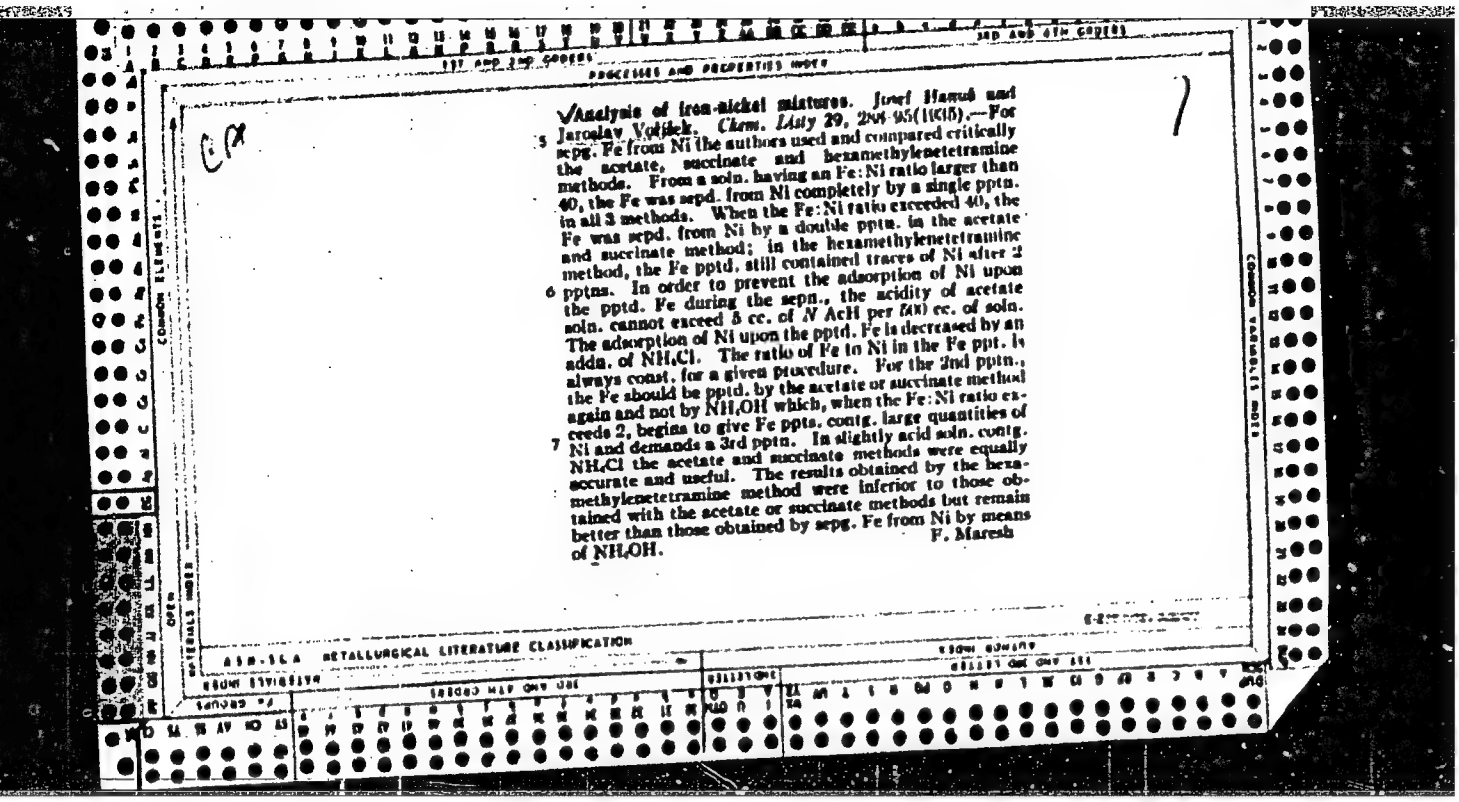
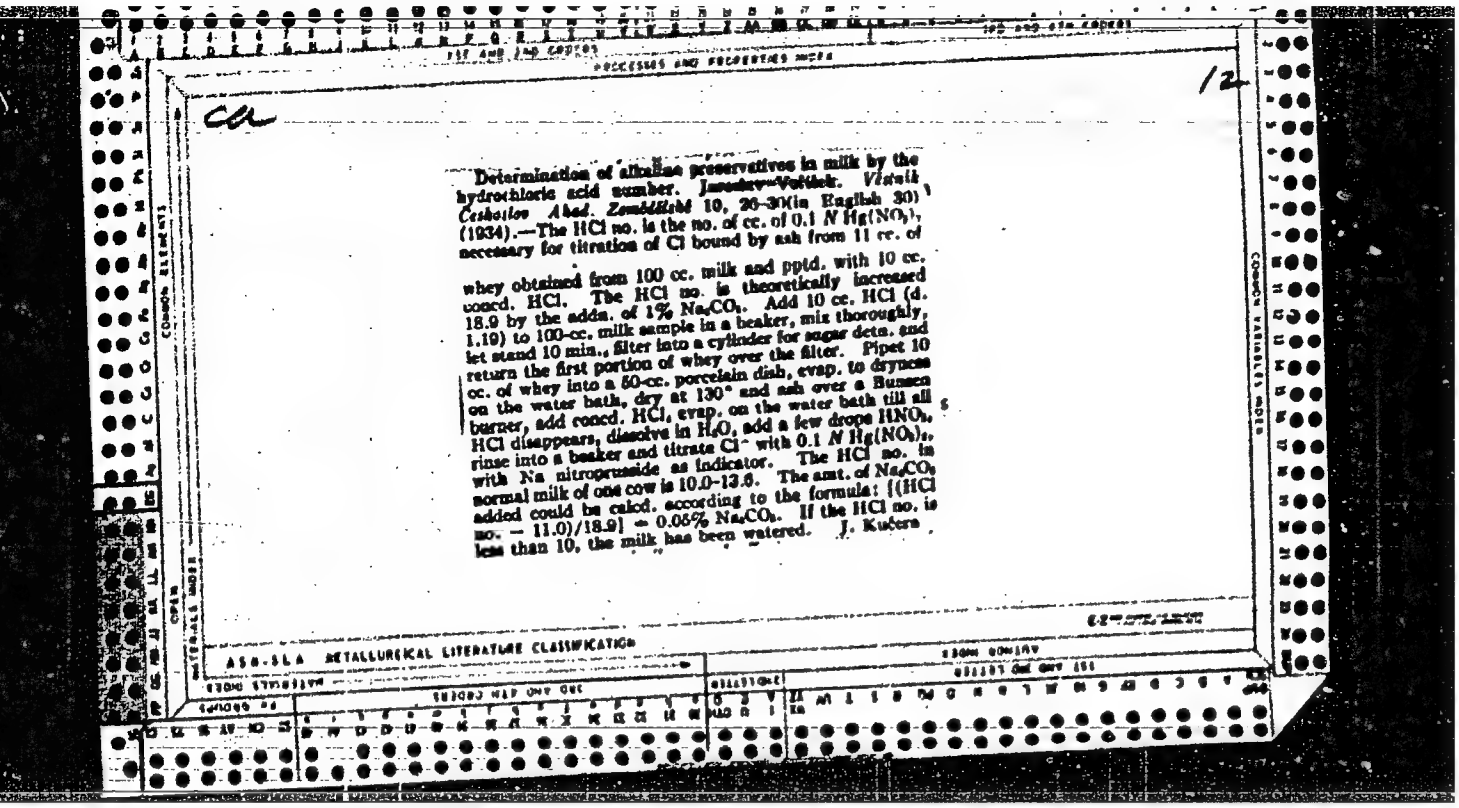
The action of hydrazine polysulfide upon oleic acid. JAS. VOLLMAR. *Chem. Listy* 26, 280-7(1932).—Hydrazine polysulfide $(NH_4NH_4)S_x$, prepd. by passing H_2S into hydrazine hydrate, was mixed with 10 g. oleic acid in the cold. The mixt. foams from the evolved H_2S and changes from a yellow to a colorless soln. in 30 days. After 30 days the solid mass was dissolved in warm 50% EtOH and treated with diluted HCl (1:1). After the ppted. fatty acid was washed with hot H_2O, dried and extd. with C_6H_6, the C_6H_6-sol. fraction was recrystd. 3 times from EtOH and $CHCl_3$ and identified as stearic acid; yield 6.8 g., m. 69.6°. The C_6H_6-insol. fraction was recrystd. 3 times from EtOH and $CHCl_3$ and identified as stearyl hydrazide; m. 114°, yield 2.5 g., N = 9.50%. A mixt. of oleic acid and hydrazine hydrate was refluxed over a free flame for 8 hrs. while a const. stream of H_2S was passed through the mist. The product crystd. 3 times from EtOH was stearyl hydrazide, m. 113°; the filtrate contained oleic hydrazide. In a hot soln. oleic hydrazide forms and is hydrogenated in the presence of air to stearic hydrazide by a slight excess of $(NH_4NH_4)S_x$.

FRANK MARSH



Analysis of iron-nickel mixtures. Josef Hanuš and Jaroslav Votíček. *Chem. Listy* 29, 288-95(1935).—For sepn. Fe from Ni the authors used and compared critically the acetate, succinate and hexamethylenetetramine methods. From a soln. having an Fe:Ni ratio larger than 40, the Fe was sepd. from Ni completely by a single pptn. in all 3 methods. When the Fe:Ni ratio exceeded 40, the Fe was sepd. from Ni by a double pptn. in the acetate and succinate method; in the hexamethylenetetramine method, the Fe pptd. still contained traces of Ni after 2 pptns. In order to prevent the adsorption of Ni upon the pptd. Fe during the sepn., the acidity of acetate soln. cannot exceed 5 cc. of *N* AcH per 100 cc. of soln. The adsorption of Ni upon the pptd. Fe is decreased by an addn. of NH_4Cl. The ratio of Fe to Ni in the Fe ppt. is always const. for a given procedure. For the 2nd pptn., the Fe should be pptd. by the acetate or succinate method again and not by NH_4OH which, when the Fe:Ni ratio exceeds 2, begins to give Fe ppts. contg. large quantities of Ni and demands a 3rd pptn. In slightly acid soln. contg. NH_4Cl the acetate and succinate methods were equally accurate and useful. The results obtained by the hexamethylenetetramine method were inferior to those obtained with the acetate or succinate methods but remain better than those obtained by sepg. Fe from Ni by means of NH_4OH.

F. Maresh



Determination of alkaline preservatives in milk by the hydrochloric acid number. Jansterv-Velthek. *Vitavik Ceskoslov Akad. Zemědělské* 10, 26-30(in English 30) (1934).—The HCl no. is the no. of cc. of 0.1 *N* $Hg(NO_3)_2$ necessary for titration of Cl bound by ash from 11 cc. of whey obtained from 100 cc. milk and pptd. with 10 cc. concd. HCl. The HCl no. is theoretically increased 18.9 by the addn. of 1% Na_2CO_3. Add 10 cc. HCl (d. 1.19) to 100-cc. milk sample in a beaker, mix thoroughly, let stand 10 min., filter into a cylinder for sugar detn. and return the first portion of whey over the filter. Pipet 10 cc. of whey into a 50-cc. porcelain dish, evap. to dryness on the water bath, dry at 130° and ash over a Bunsen burner, add concd. HCl, evap. on the water bath till all HCl disappears, dissolve in H_2O, add a few drops HNO_3, rinse into a beaker and titrate Cl^- with 0.1 *N* $Hg(NO_3)_2$, with Na nitroprusside as indicator. The HCl no. in normal milk of one cow is 10.0–13.6. The amt. of Na_2CO_3 added could be calcd. according to the formula: [(HCl no. − 11.0)/18.9] = 0.05% Na_2CO_3. If the HCl no. is less than 10, the milk has been watered. J. Kučera

VORISEK, Jaroslav

Zero power heavy water reactor TR-0. Jaderna energie 9 no.8: 264 Ag '63.

1. Ustav jaderneho vyzkumu, Ceskoslovenska akademie ved, Rez u Prahy.

CZECHOSLOVAKIA

LEJSEK, K., SEDLACEK, J., VORISEK, V; Chair of Chemistry and Pathological Physiology, Medical Faculty, Charles University, (Katedra Chemie a Patologicke Fysiologie Lek. Fak. KU), Hradec Kralove.

"Oxygen Requirements of Lung and Liver Tissue After Diphosgene Poisoning."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 77

Abstract: Experiments with sections of rabbit and frog organs were conducted. No difference of oxygen consumption due to poisoning was found; usage of glucose by the tissue did not change as a result of the poisoning. The lung parenchyma is heavily damaged by the poison. 1 Western, 1 East German, 1 Polish reference. Submitted at "16 Days of Physiology" at Kosice, 27 Sep 65.

1/1

VORISEK, M.

Vorisek, M. Star distribution caused by cosmic rays in nuclear emulsions. p. 609. CESKOSLOVENSKY CASOPIS PRO FYSIKU. Praha. Vol. 4, no. 5, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 11, Nov. 1955, Uncl.

V.oRISEK, M.

21(3,4) PHASE I BOOK EXPLOITATION CZECH/2404

Habanec, V., Doctor; J. Havelka, Engineer; Zd. Klasivec, Doctor of Medicine; Zb. Hrdlička, Engineer; L. Chudáček (Graduate in Physics); V. Kouřím, Engineer; J. Kuba, Doctor of Natural Sciences; V. Kyslivec, Professor; Jan Tůma, Engineer; and M. Voříšek (Graduate in Physics)

Atom a jaderná technika (The Atom and Nuclear Engineering) Praha, Naše vojsko, 1957. 290 p. (Series: Universita vojáka) 4,000 copies printed.

Reviewers: Bittner, Engineer; Drška, Engineer; Hrdlička, Engineer; Kulka, Engineer; Spurný, Doctor; and Šimáně, Engineer; Ed.: Stanislav Vobořil.

PURPOSE: The book is intended for the general reader.

COVERAGE: The book outlines the principles and operation of nuclear power plants and the use of radioisotopes. The introductory chapters cover the fundamentals of nuclear physics and radioactivity. Several subsequent chapters deal with reactor physics, types of reactors, their engineering, control and

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instrumentation. Operating and planned nuclear power installations are described. A short chapter is devoted to the possibility of using nuclear power in transportation. The remaining chapters report on radioisotopes for industry, and on radiology, radiation hazards and safety measures. No personalities are mentioned. There are 25 references, all Czech.

TABLE OF CONTENTS:

VORISEK, Miroslav

Determination of the moisture of materials by scattering neutrons on protons. Jaderna energie 3 no.9:258-271 S '57.

1. Ustav jaderne fysiky, Ceskoslovenska akademie ved, Praha.

~~SMRKOVSKY~~, VORISEK, M.

CZECHOSLOVAKIA/Nuclear Physics - Installations and Instruments. Methods of Measurement and Research C-2

Abs Jour : Ref Zhur - Fizika, No 6, 1958, No 12460

Author : Vorisek Miroslav
Inst : Institute of Nuclear Physics, Czechoslovak Academy of Sciences, Prague Czechoslovakia
Title : Scintillation Detector for Slow Neutrons

Orig Pub : Ceskosl. casop. fys. 1957, 7, No 4, 396-407

Abstract : A mixture of ZnS (Ag) and B_2O_3 is investigated with an aim toward using it for detection of thermal and resonant neutrons. The ratio of the ZnS (Ag): B ranging from 8:1 to 12:1 is optimum from the point of view voth of the efficiency with respect to neutrons, and of the form of the integral spectrum. The best thickness of the layer of the mixture is 0.75 to 1.0 mm. For these optimum values, the efficiency of the mixture with respect to neutrons is 25% at a low background of gamma rays. At a strong background of gamma rays, it is possible to reduce the background to 10^{-7}% with the aid of a discriminator, and the efficiency for neutrons remains not less than 5%.

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CZECHOSLOVAKIA/Nuclear Physics - Installations and Instruments. Methods of Measurement and Research C-2

Abs Jour : Ref Zhur - Fizika, No 11, 1958, No 24543

Author : Vorisek Miroslav
Inst : Institute of Nuclear Physics, Prague, Czechoslovakia
Title : Detector for Slow Neutrons.

Orig Pub : Chekhosl. fiz. zh., 1957, 7, No 6, 757-766

Abstract : A scintillation counter is proposed for slow neutrons. The counter is obtained by sintering ZnS (Ag) and B_2O_3. The experimentally-obtained optimum value of the ratio ZnS (Ag)/B, which is approximately equal to 9:1, makes it possible to obtain a scintillator of large dimensions with a thickness from 0.75 to 1 mm with sufficiently high efficiency with respect to registration of thermal neutrons (25%). The detector can operate with a strong background of gamma rays because of its different sensitivity to gamma rays (from 10^{-4} to 10^{-8}%) and thermal neutrons (from 10 to 5% respectively). The counter has a resolution on the order of 10^{-7} seconds and a sufficiently good stability.

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VORISEK, M.

CZECH/37-59-2-6/20

AUTHOR: Miroslav Vořišek

TITLE: The Absorption of a Beam of Neutrons in Absorbers of Different Shapes

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 2, pp 157-166

ABSTRACT: The present paper limits itself to the calculation of absorption of a beam of neutrons in those cases when the effective cross-section for absorption varies as the reciprocal of the velocity. The calculation leads, in most cases, to integrals which cannot be expressed by elementary functions. They can, however, be evaluated by special functions or rapidly converging series. This is often quicker than numerical integration. The present work sets out to supplement the known results for the absorption of a beam of neutrons in a plate (Ref 1) by including the absorption of mono-energetic neutrons (first part), thermal neutrons (second part) and resonance neutrons (third part), in absorbers of spherical shape (either full or hollow) and of cylindrical shape - again full or hollow. The exact solutions, as well as approximate solutions, are discussed. The following

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The Absorption of a Beam of Neutrons in Absorbers of Different Shapes

assumptions are made: a) the absorption of mono-energetic neutrons is governed by an exponential law (Ref 2); b) the scattering is small compared with the absorption; c) the size of the absorber is assumed small in the direction of the beam, compared with the mean free path of scattering. Under these assumptions, the number of neutrons passed through the absorber in unit-time is given by Eq (1). The absorption is given by the difference between the number of incident neutrons and equation (1), i.e. Eq (3). From Eqs (1) and (3) the probability of absorption and transmission is calculated (Eq (4)). Eqs (5) - (7) indicate means of solving Eq (4), while Eqs (8), (9) and (10) show approximate solutions.

Part I. (Parts 2 and 3 are being prepared).

The absorption of mono-energetic neutrons in a plate is given by the well-known exponential law (Eq (12)). Eq (15) gives the numbers of neutrons transmitted through a sphere per unit-time. Eq (15) can be transformed to (16) and an approximate solution found by Eq (17).

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CZECH/37-59-2-6/20

The Absorption of a Beam of Neutrons in Absorbers of Different Shapes

Eqs (18)-(24) deal with absorption in a hollow sphere.
Eqs (25)-(30) deal with absorption in a cylinder.
Eqs (31)-(47) deal with absorption in a hollow cylinder.
There are 4 tables and 7 references, of which 6 are English and 1 is Soviet.

ASSOCIATION: Ustav jaderneho vyzkumu CSAV, Praha
(Institute of Nuclear Physics, Ac. Sc., Prague)

SUBMITTED: September 16, 1958

Card 3/3

VORISEK, Miroslav

Distribution of thermal neutron absorption density in fuel cells from natural uranium. Jaderna energie 10 no.11: 407 N '64.

1. Institute of Nuclear Research of the Czechoslovak Academy of Sciences, Rez near Prague.

VORISEK, Miroslav

Distribution of the density of thermal neutron absorption in fuel elements with internal structure. Jaderna energie 9 no.8: 264 Ag '63.

1. Ustav jaderneho vyzkumu, Ceskoslovenska akademie ved, Rez u Prahy.

VORISEK, M.

International symposium of the International Atomic Energy Agency on exponential and critical series. Jaderna energie 10 no. 3: 106-107 Mr '64.

SOURCE CODE: CZ/0038/66/000/005/0161/0165

ACC NR: AP7002326

AUTHOR: Chochlovsky, Igor--Kholdhlovskl, I.; Riha, Karol--Rzhiga, K.; Panyr, Milos; Vorisek, Miroslav--Vorzhishek, M.; Charrad, Bretislav--Kharrad, B.

ORG: [Chochlovsky; Riha; Panyr] Choroprojekt, Prague; [Vorisek; Charrad] Institute of Nuclear Research, CSAV, Roz (Ustav jadorneho vyzkumu CSAV)

TITLE: TR-0 heavy water zero-power reactor of Nuclear Research Institute of Czechoslovakian Academy of Sciences

SOURCE: Jaderna energie, no. 5, 1966, 161-165

TOPIC TAGS: research reactor, heavy water

ABSTRACT: The zero-power heavy water reactor TR-0, a pulsed neutron source and an exponential heavy water system, is described. This reactor has rod-shaped fuel elements of natural uranium. The active zone has a diameter of 3500 mm and a height up to 4000 mm. Its auxiliary layout was selected so that long-term studies on heavy water reactor lattices could be carried out. The principles of the long-term experimental program are outlined. The engineering solutions with respect to the reactor vessel and its system for the automatic adjustment of the lattice support and to the reactor circuits are described. The principal circuits considered are the heavy water circuit and the inert gas circuit in which dry air is used. A brief description is given of the construction work. This article was presented by F. Klik. Orig. art. has: 2 figures and 6 tables. [NA]

SUB CODE: 18 / SUBM DATE: 14Oct65

Card 1/1 UDC: 621.039.5TR-0 621.039.524.46 621.039.5(437)

VORISKOVA, M.; Technicka spoluprace: OBSILOVA, F.

Diagnostic value of the amyl nitrite test. Cesk. pediat. 20 no.8:693-698 Ag '65.

1. II. detska klinika fakulty detskeho lekarstvi Karlovy University v Praze (prednosta prof. dr. J. Houstek, DrSc.).

VORISEK, P.

Experimental and clinical problems on the influence of ionizing radiations on the development of the fetus. Cas. lek. cesk. 101 no.50:241-246 14 D '62.

1. Ustav pro peci o matku a dite v Praze-Podoli, reditel doc. dr. M. Vojta.

(FETUS) (EMBRYO) (RADIATION INJURY)
(ABNORMALITIES)

VORISEK, P.

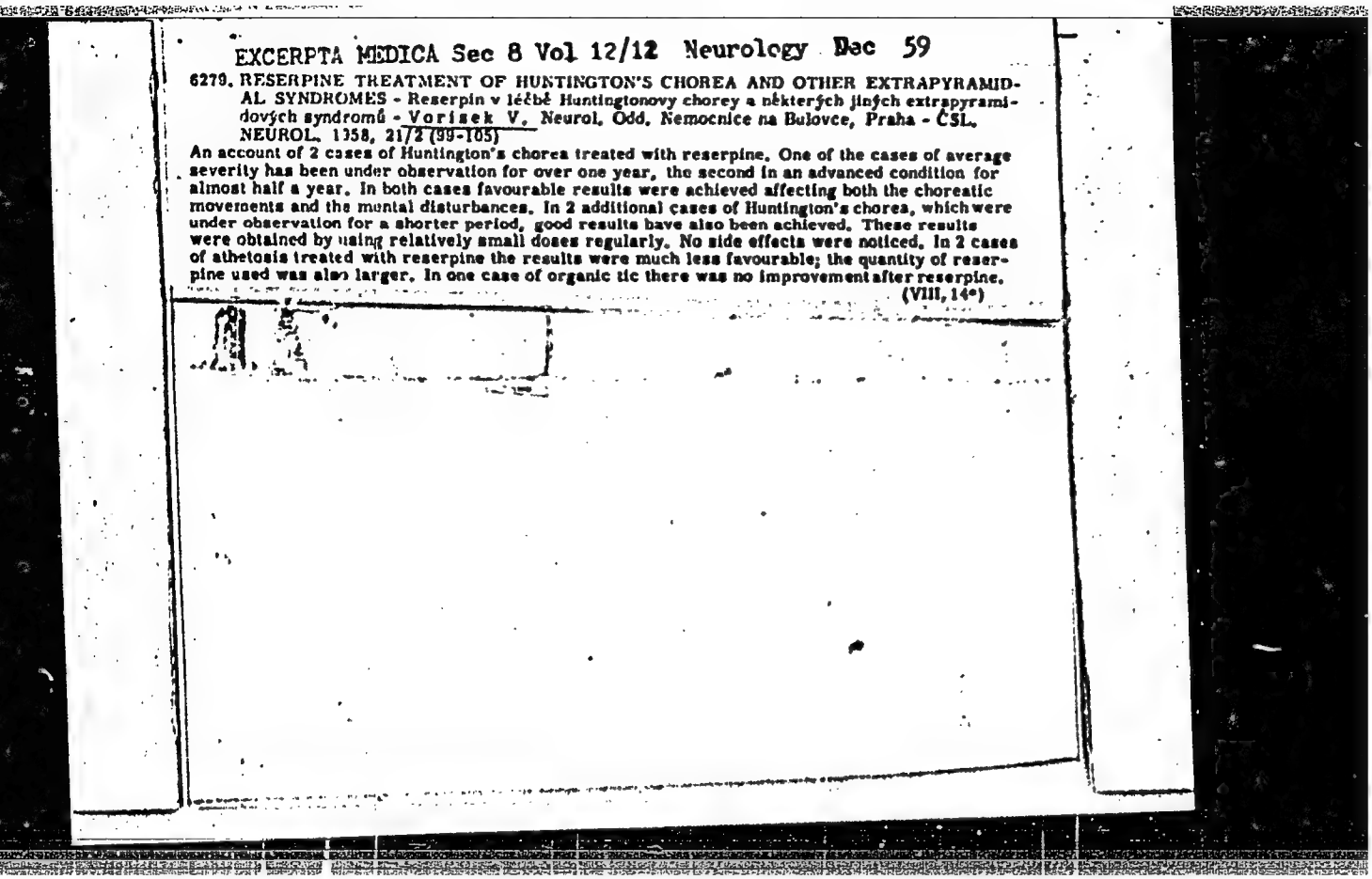
Effect of small doses of ionizing radiations on the ovary and on its function. Cas.lek.cesk 100 no.4? Lek veda zahr:217-224 20 0 '61.

1. Ustav pro peci o matku a dite, Praha-Podoli, reditel doc. MUDr. M. Vojta, zaslouzily lekar CSSR.

(OVARIES radiation eff)

VORISEK, Premysl (Czechoslovakia)

Cable spinning of cotton industry synthetic fibers. Magy textil 17 no.1:25-28 Ja '65.



EXCERPTA MEDICA Sec 8 Vol 12/12 Neurology Dec 59

6279. RESERPINE TREATMENT OF HUNTINGTON'S CHOREA AND OTHER EXTRAPYRAMIDAL SYNDROMES - Reserpin v léčbě Huntingtonovy chorey a některých jiných extrapyramidových syndromů - Vorisek V. Neurol. Odd. Nemocnice na Bulovce, Praha - ČSL. NEUROL. 1958, 21/2 (99-105)

An account of 2 cases of Huntington's chorea treated with reserpine. One of the cases of average severity has been under observation for over one year, the second in an advanced condition for almost half a year. In both cases favourable results were achieved affecting both the choreatic movements and the mental disturbances. In 2 additional cases of Huntington's chorea, which were under observation for a shorter period, good results have also been achieved. These results were obtained by using relatively small doses regularly. No side effects were noticed. In 2 cases of athetosis treated with reserpine the results were much less favourable; the quantity of reserpine used was also larger. In one case of organic tic there was no improvement after reserpine. (VIII, 14*)

VORISEK, V.

Information on static resistance of welded joints in carbon-poor steel. p. 345. ZVARANIE. (Ministerstvo hutneho prumyslu a rudnych bani a Ministerstvo strojarstva) Bratislava. Vol. 3, no. 11, Nov. 1954.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

VACHA, Karel; VORISEK, Vladimir; CHROBAK, Ladislav

Significance of detecting nucleated erythrocytes in the peripheral blood. Sborn. ved. prac. lek. fak. Karlov. Univ. (Hrad. Kral.) 6 no.4:435-442 '63.

1. I. interni klinika; prednosta: prof. MUDr. F.Cernik.

VORISEK, Vladimir, inz. CSc.

Real effect of prestressed anchored poles for very high voltage lines. Inz stavby 12 no.7:308-315 Jl'64

1. Slovak Higher School of Technology, Chair of Metal and Wood Constructions.

CZECHOSLOVAKIA / Pharmacology, Toxicology. Tranquil:[illegible]rs. [illegible]

Abs Jour: Ref Zhur-Biol., No 18, 1958, 85088.

Author : Vorisek, Vlastimil.
Inst : Not given.
Title : The Treatment with Reserpine of Huntington's Chorea and of Other Syndromes of Extrapyramidal Dysfunction.

Orig Pub: Ceskosl. neurol., 1958, Vol 21, No 2, 99-105.

Abstract: Description is given of good results obtained in the treatment, with comparatively small doses of reserpine (R), of four patients with Huntington's chorea. R influenced both the hyperkinesia and the psychic disorders. No side effects were noted. In two patients with athetosis, treated with larger doses, R was less effective. In organic tic, no improvement was seen. -- Yu. R.

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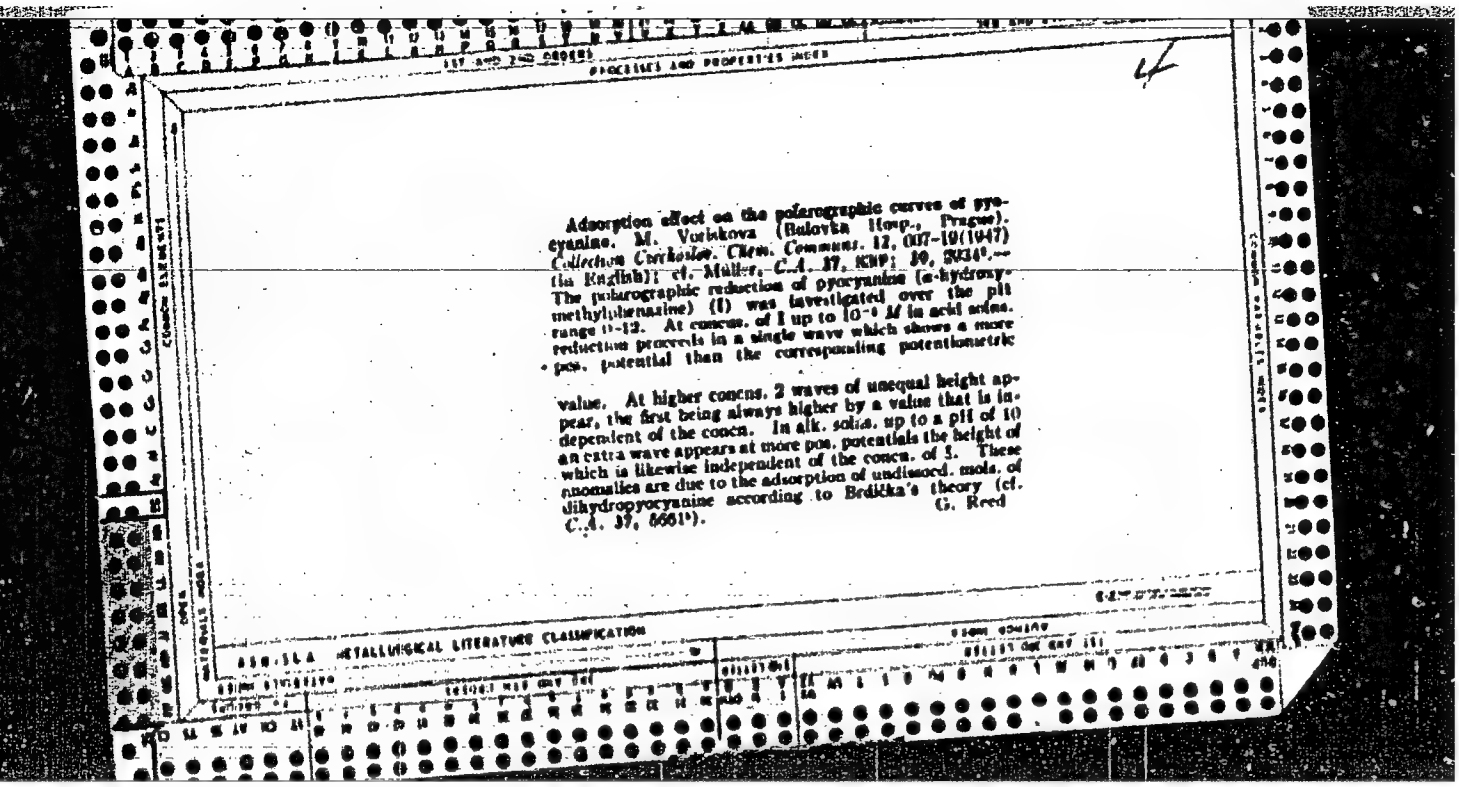
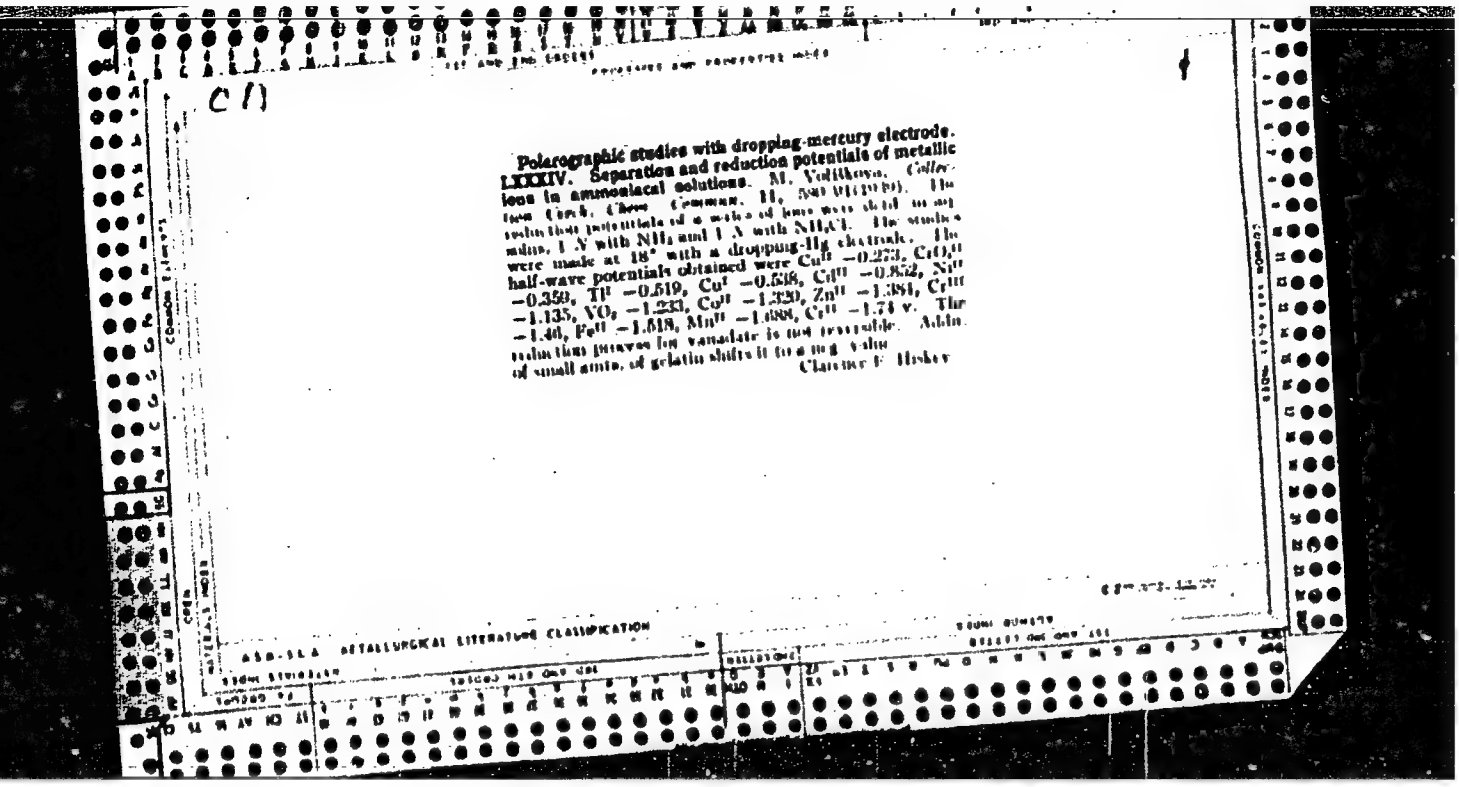


Adsorption effect on the polarographic curves of pyocyanine. M. Vorlíková (Balcvka Hosp., Prague). *Collection Czechoslov. Chem. Communs.* 12, 607–19(1947) (in English); cf. Müller, *C.A.* 37, 6661; 39, 2834.—The polarographic reduction of pyocyanine (*n*-hydroxymethylphenazine) (I) was investigated over the pH range 0–12. At concns. of I up to 10^{-4} *M* in acid solns. reduction proceeds in a single wave which shows a more pos. potential than the corresponding potentiometric value. At higher concns. 2 waves of unequal height appear, the first being always higher by a value that is independent of the concn. In alk. solns. up to a pH of 10 an extra wave appears at more pos. potentials the height of which is likewise independent of the concn. of I. These anomalies are due to the adsorption of undissocd. mols. of dihydropyocyanine according to Brdička's theory (cf. *C.A.* 37, 6661[9]).

G. Reed

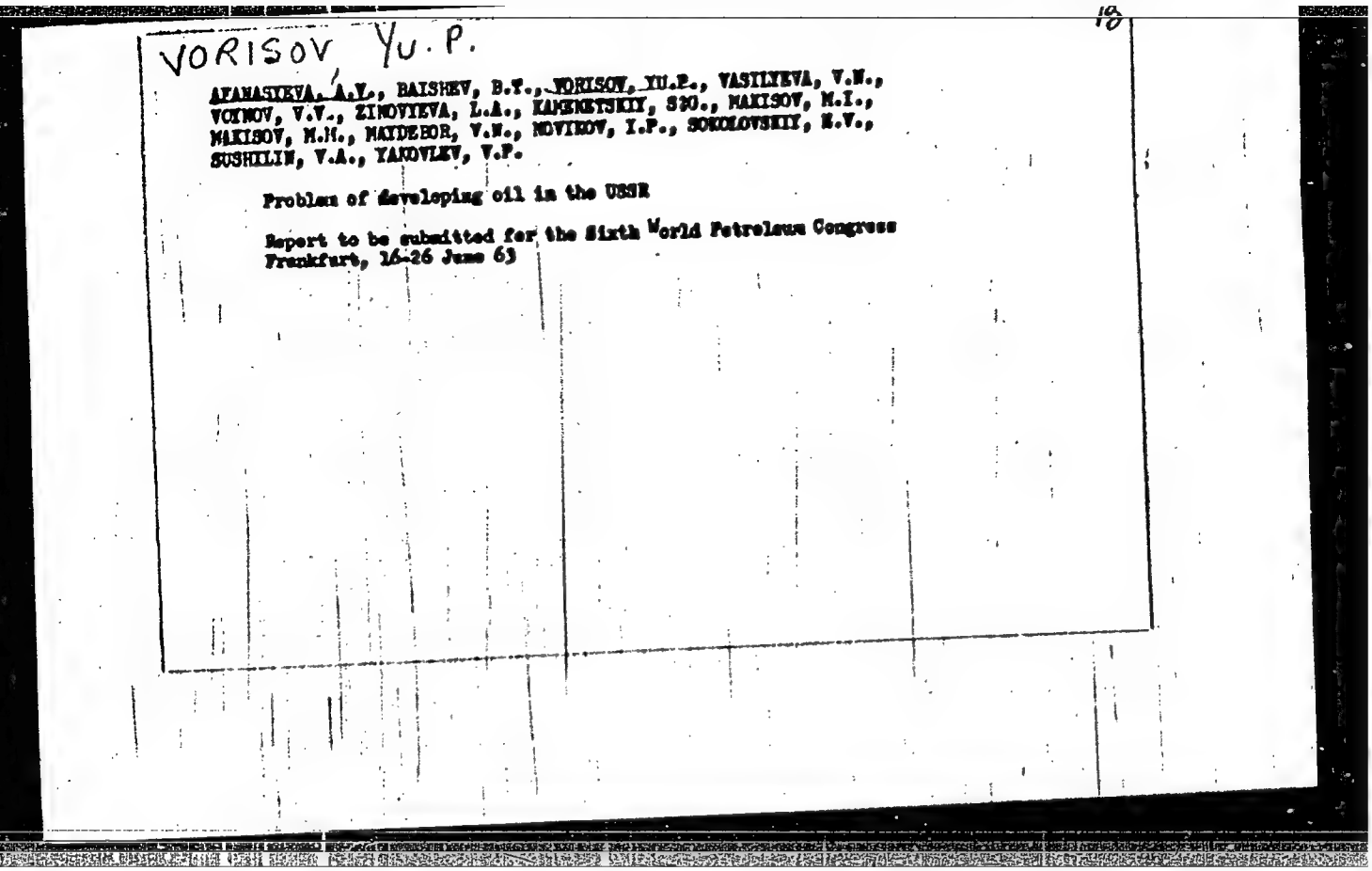


C 11

Polarographic studies with dropping-mercury electrode. LXXXIV. Separation and reduction potentials of metallic ions in ammoniacal solutions. M. Vosátková. *Collection Czech. Chem. Commun.* 11, 500 (1939). The reduction potentials of a series of ions were studied in solns. 1 *N* with NH_3 and 1 *N* with NH_4Cl. The studies were made at 18° with a dropping-Hg electrode. The half-wave potentials obtained were Cu^{II} −0.273, Cd^{II} −0.359, Tl^{I} −0.519, Cu^{I} −0.558, Cl^{II} −0.852, Ni^{II} −1.135, VO_3 −1.233, Co^{II} −1.320, Zn^{II} −1.384, Cr^{III} −1.46, Fe^{II} −1.518, Mn^{II} −1.688, Cr^{II} −1.74 v. The reduction process for vanadate is not reversible. Addn. of small amts. of gelatin shifts it to a neg. value.

Clarence F. Hiskey

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



VORISOV Yu. P.

18

AFANASYEVA, A.V., BAISHEV, B.T., VORISOV, YU.P., VASILYEVA, V.N., VOINOV, V.V., ZINOVYEVA, L.A., KAMENETSKIY, S.O., MAKISOV, M.I., MAKISOV, M.M., MAYDEBOR, V.N., MOVIKOV, I.P., SOKOLOVSKIY, E.V., SUSHILIN, V.A., YANOVLEV, V.P.

Problem of developing oil in the USSR

Report to be submitted for the Sixth World Petroleum Congress Frankfurt, 16-26 June 63

VORISOV, Yu.Ya., and MASHKOVA, T.I.

"Experimental work on the acceleration of drying in an acoustic field."

Report presented at the All-Union Scientific-Engineering Conference on the Application of Ultrasonics in Industry, Moscow, 22-26 November 1960.

VORK, Hnas, prof.; POBUL, G., kand. tekhn. nauk, retsenzent; ABO, L., red.; TIMMER, K., tekhn. red.

[Steel overhead lines] Ohuliinid terasjuhtmeist. Teine, umbertootatud trukk. Tallinn, EEsti riiklik kirjastus, 1961. 78 p. (MIRA 15:5)

(Electric lines—Overhead)

DUNAYEVSKIY, M.M.; IL'INSKIY, B.D.; SINEBRYUKHOV, N.V.; VORKEL', M.M.; ZORIN, S.V., red.; DOBUZHINSKAYA, L.V., tekhn.red.

[Safety regulations in rolling-mill practice] Pravila bezopasnosti v prokatnom proizvodstve. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1960. 112 p. (MIRA 13:7)

1. Soyuz rabochikh metallurgicheskoy promyshlennosti. TSentral'nyy komitet. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii proizvodstva i truda chernoy metallurgii (for Dunayevskiy, Il'inskiy, Sinebryukhov, Vorkel').
(Rolling mills--Safety measures)

FOJTIK, Frantisek; TOUPALOVA, Hana; VORISEK, Vlastimil

Artificial hibernation in severe cranial & brain injuries. Cas. lek. cesk. 97 no.30:927-932 18 July 58.

1. Chirurgicka klinicka zakladna UDL, prednosta prof. MUDr. Jan Knobloch, neurologicke oddeleni, prednosta prof. MUDr. Otakar Janota, v Praze 8-na Bulovce. F. F. Praha 8, Nad Rokoskou 21.
(BRAIN, wds. & inj.
ther., artif. hibernation (Cz))
(HIBERNATION, ARTIFICIAL, in var dis.
craniocerebral inj. (Cz))

VORISEK, V.

VORISEK, Vlastimil

Reserpine treatment of Huntington's chorea & other extrapyramidal syndromes. Cesk. neur. 21 no.2:99-105 Mar 58.

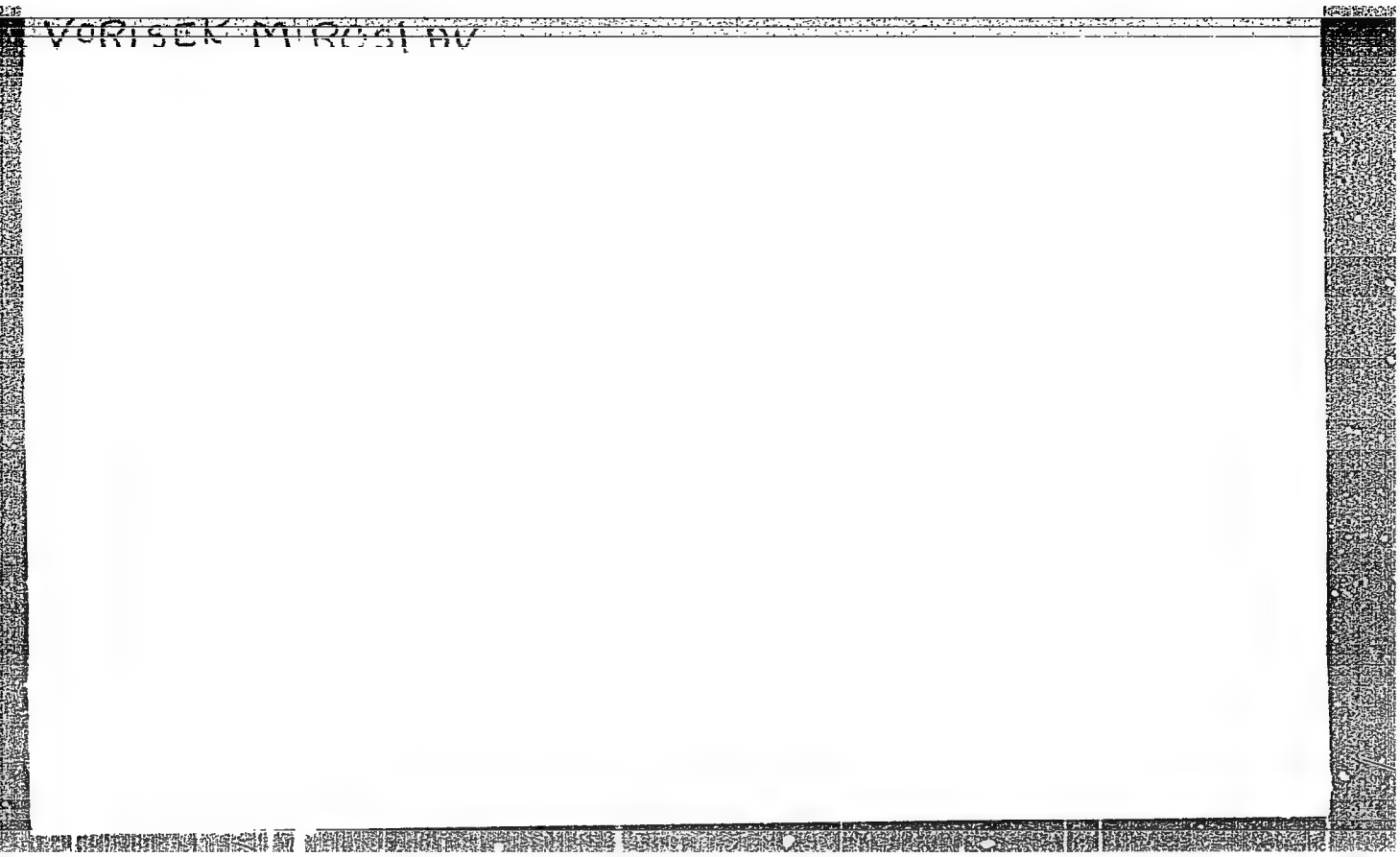
1. Neurologicke oddeleni nemocnice na Bulovce v Praze 8, prednosta prof. Dr Otakar Janota.

(HUNTINGTON'S CHOREA, ther.
reserpine (Cz))
(EXTRAPYRAMIDAL TRACT, dis.
ther., reserpine (Cz))
(RESERPINE, ther. use
Huntington's chorea & other extrapyramidal disord. (Cz))

VOKISEK, V.

"Experimental contribution to the problem of the function of microelements in plant nutrition. IV. Experiments with the potato (Solanum licopersicum). II."
Chemike Zvesti, Bratislava, Vol 6, No 3/4, Mar./Apr. 1952, p. 209

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress



VORISOV, E.

Title: Elimination of the radio-receiving interferences produced by the ST-35 apparatus

Author: E. Vorisov

Publication: Red Army Communications

No. 2-3 p. 36-39 Date: 1944

From List ATIC 20361-1

JANES, Hans; KAASIK, Paul; PUUSEPP, Eugen; VOLDEK, Aleksander; VORK,H., prof., retsenzent; OORN, F., inzh., retsenzent; ABO, L., red.; VAHTRE, I., tekhn. red.

[Electric machinery] Elektrimasinad [By] H.Janes ia teised. Tallinn, Eesti riiklik kirjastus, 1961. 647 p. (MIRA 15:5)
(Electric generators) (Electric transformers)

USSR/General Problems. A-

Abs Jour : Ref Zhur - Khimiya, No 10, 1957, 33422

Author : York, Z.K., Ivanchenko, A.S.
Inst :
Title : Electrolyzer with a Coal Screen.

Orig Pub : Khimiya v shkole, 1957, No 1, 63-64.

Abstract : A scheme and the description of the apparatus is given. Instructions for carrying out the experiments are also included.

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VORKACHEV, G. G. Cand. Agric. Sci.

"Some Results of the First Year of Reclamation of Virgin and Fallow Lands in the Altay," Agrobiol., No.3, pp. 106-110, 1955

Altay Zonal Scientific Research Inst. of Agriculture and Animal Husbandry, Barnaul

Translation 2030158

USSR/Cultivated Plants - Technical, Oleaginous, Sachariferous. II-7

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39421

Author : Vorkachev, G.G.

Inst : All-Union Scientific Research Institute of East Crops.

Title : Efficiency of Fertilizers Used While Planting Southern Hemp Under Conditions Prevailing in Northern Caucasus.

Orig Pub : Tr. Vses. N.-i. in-t lub. kul'tur, 1957, vyp. 22, 85-86.

Abstract : No abstract.

Card 1/1

DMITRIYEVSKIY, K.I., master-vzryvnik; BYCHKOV, F.; NIKITIN, L., inzh.; VORKHLIK, M., inzh.; TYUTRIN, V., inzh.; YUDINA, N.F., inzh.; ZANEGIN, G., inzh.

Editor's mail. Bezop. truda v prom. 5 no.8:34 Ag '61. (MIRA 14:8)

1. Shakhta No.32, Stalinskaya oblast' (for Dmitriyevskiy). 2. Sherlovogorskiy gornoobogatitel'nyy kombinat, Chitinskaya oblast' (for Nikitin, Vorkhlik, Tyutrin). 3. Otdel tekhniki bezopasnosti Nizhne-Tagil'skogo metallurgicheskogo kombinata imeni V.I. Lenina (for Yudina). 4. Tekhnicheskiy otdel tresta Dorogobuzhshakhtostroy (for Zanegin).

(Mining engineering--Safety measures)

VORKACHOBOV, L.A.

Treatment of abscesses and fistulae in children after the injection of medical substances. Sov.med. 25 no.8:94-97 Ag '60. (MIRA 13:9)

1. Iz detskoy klinicheskoy bol'nitsy im. N.F.Filatova (glavnyy vrach M.N.Kalugina) i kliniki detskoy khirurgii (zav. kafedroy - prof. S.D. Ternovskiy) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.

(ABSCESS) (FISTULA) (INJECTIONS)

VOINKAPIC, M.; RADENOVIC, M.

Supplying ammunition to advanced detachments in defense, p. 25

VOJNI GLASNIK (Jugoslavenska narodna armija) Beograd, Yugoslavia.
Vol. 13, no. 1, Jan 1959

Monthly List of East European Accessions EEAI LC, Vol. 8, no. 6, June 1959
Uncla.

VORKEL', M.M.

Industrial traumatism in rolling mills. Metallurg 7 no.3:35-36 Mr '62. (MIRA 15:2)

(Rolling mills--Safety measures)

VORKOV, Sergey Stepanovich, kontradmiral; POLIKARPOV, V.D., red.; BUKOVSKAYA, N.A., tekhn. red.

[Flag on the gaff] Flag na gafele. Moskva, Voenizdat, 1962. 127 p. (MIRA 15:7)
(Black Sea--World War, 1939-1945--Personal narratives)

YORKOV, Yu., gvardii podpolkovnik, voyennyy letchik pervogo klassa;
NEDEL'KIN, V., kapitan

Radar determination of wind. Av.i kosm. 46 no.9:46-47 S '63.
(MIRA 16:10)

VORKOVASTOV, K.S., gornyy inzhener-marksheyder

Profiling vertical mine workings. Gor. zhur. no.3:50-52 Mr '63.
(MIRA 16:4)

1. Magadanskiy okrug Gosudarstvennogo komiteta pri Sovete Ministrov RSFSR po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.

RODIONOV, L. Ye., kand. tekhn. nauk; VORKOVASTOV, K. S., gornyy inzh.

Accuracy of a mine survey in working placer deposits by the open-pit method. Gor. zhur. no.11:64-67 N '62. (MIRA 15:10)

1. Vsesoyuznyy zaochnyy politekhnicheskiy institut, Moskva (for Rodionov). 2. Magadanskiy sovet narodnogo khozyaystva (for Vorkovastov).

(Mine surveying)

VORKUL', M.L., inzh.; ISKENDEROV, I.M., inzh.

Machinery for working rock. Stroi. i dor. mash. 9 no.7:12-14 Jl '64. (MIRA 18:3)

BUKRINSKAYA, A.G.; GITEL'MAN, A.K.; VORKUNOVA, G.K.

Early proteins of myxoviruses. Vop. virus. 9 no.5:569-575 S-O '64. (MIRA 18:6)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

BUKRINSKAYA, A.G.; VORKUNOVA, G.K.

Reproduction of ribonucleic acid of the influenza virus in the presence of low concentrations of actinomycin D. Vop. virus. 9 no.6:657-661 N-D '64. (MIRA 18:11)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.

BUKRINSKAYA, A. G.; AZADOVA, N. B.; GITEL'MAN, A. K.; VORKUNOVA, G. K.

"Nekotorye zakonomernosti reproduktsii rnk-miksovirusov."

report presented at Symp on Virus Diseases, Moscow, 6-9 Oct 64.

Institut virusologii im D. I. Ivanovskogo AMN SSSR, Moskva.

VORKUT, A., inzh.

Using a device in scheduling daily shift assignments. Avt. transp. 42 no.9:19-21 S '64. (MIRA 17:11)

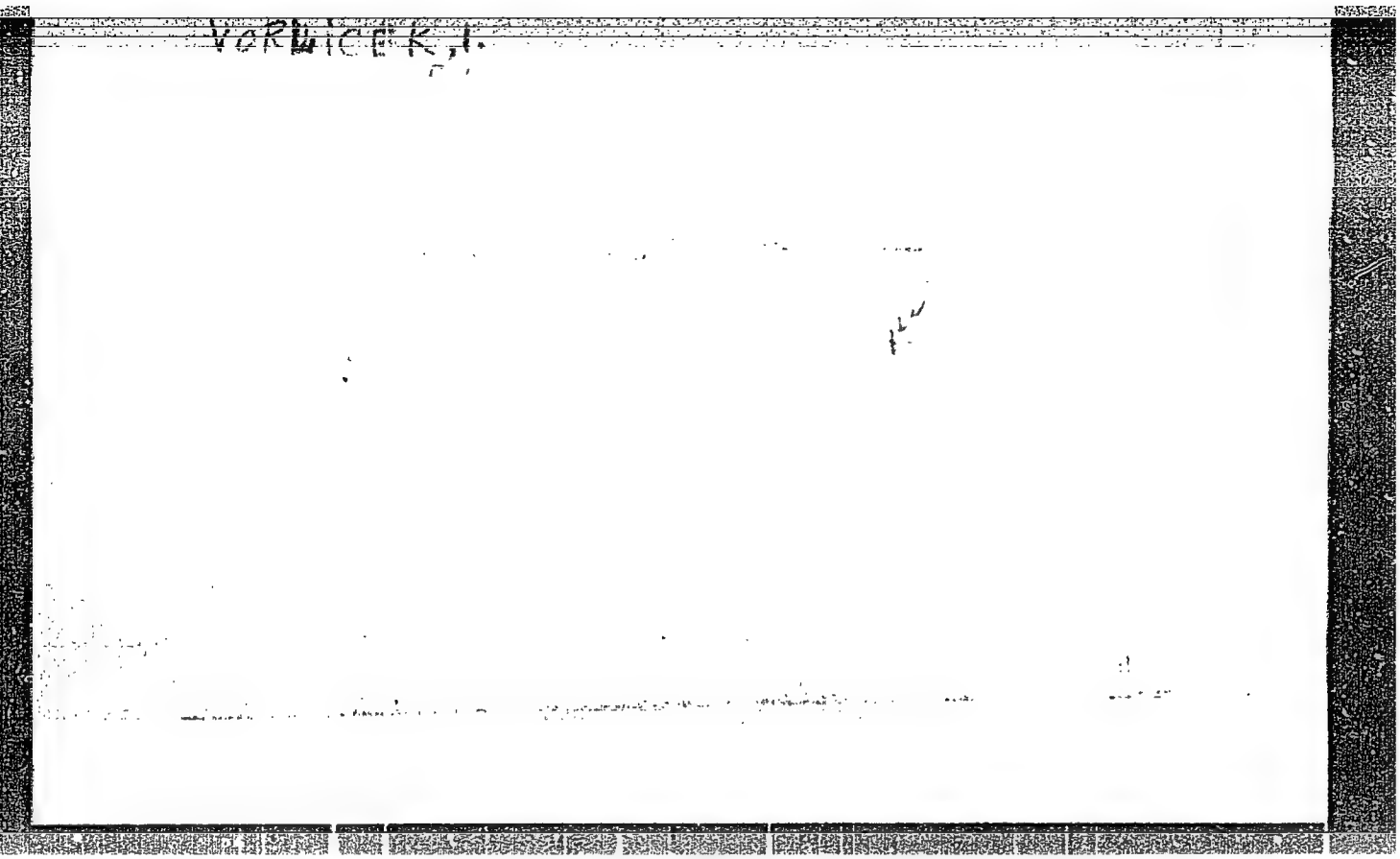
1. Kiyevskiy avtomobil'no-dorozhnyy institut.

VORLICEK, I.

"Dynamics of the impulse-type controller with variable time rate and frequency of impulses."

Automatisace. Praha, Czechoslovakia. Vol. 2, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclas



S/271/63/000/001/020/047
D413/D308

AUTHOR: Vorlicek, Ivo

TITLE: An extremal regulator

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 1, 1963, 49, abstract 1A270 (Czech pat., cl. 21 c, 46/51, no. 99848, June 15, 1961)

TEXT: The patent covers a regulator of extremal type, which serves for an automatic adjustment of a controlled quantity to its optimal value (maximum or minimum). The device consists of a two-position impulse regulator activated by the difference between the signals from the controlled quantity and from an element of the regulator which is adjusted manually. The regulator is connected in a circuit with two stable states that controls a two-position switch or commutator and also an element acting on the controlled quantity (a servomotor). To set up for the minimum or maximum, the manual regulator signal is adjusted to a value slightly higher than the

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S/271/63/000/001/020/047
D413/D308

An extremal regulator

maximum or lower than the minimum value of the controlled quantity permitted by production conditions.
[Abstracter's note: Complete translation]

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CZECHOSLOVAKIA

VORLICEK, J., VYBIRA, F.

Research Institute ZIH, Mnisek pod Brdy, and J.Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences,- Prague - (for both).

Prague, Collection of Czechoslovak Chemical Communications, No 12, December 1965, pp 4272-4279

"Amperometry with two polarisable electrodes. Part 1: Chelometric determination of iron (3) with Pt-Pt electrode system indication." (For the 75th birthday of Academician J.Heyrovsky).

CZECHOSLOVAKIA

VYHRA, F; VORLICEK, J.

1. J.Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences, Prague – (for ?); 2. Research Institute of Iron Ore Mines, Mnisek pod Brdy – (for ?)

Prague, Collection of Czechoslovak Chemical Communications, No 1, January 1966, pp 51-57

"Amperometry with two polarizable electrodes. Part 4: Direct chelometric determination of thorium."

VORLICEK, Jan, RNDr.; DOSTAL, Jan

Determining carbon in graphite raw materials and concentrates.
Rudy 12 no.6:181-182 Je '64.

1. Research Institute of the Zelezorudne doly a hrudkovny, Mnisek pod Brdy.

VORLICEK, J., RNDr.; DOLEZAL, J., doc., dr.

Fast titration determination of antimony in ores and concentrates.
Hut listy 18 no.1:55-56 Ja '63.

1. Vyzkumny ustav, Zelezne doly a hrudkovny, Mnisek pod Brdy (for Vorlicek). 2. Katedra analyticke chemie, Karlova universita, Praha (for Dolezal).

VORLICEK, Jan, RNDr.; HAVLICEK, Vaclav

Titration determination of carbon dioxide in ores.
Rudy 11 no.3:87-88 Mr '63.

1. Vyzkumny ustav zelezorudnych dolu a hrudkoven, Mnisek pod Brdy.

VORLICEK, J.

VORLICEK, J.; SELERKA, I.

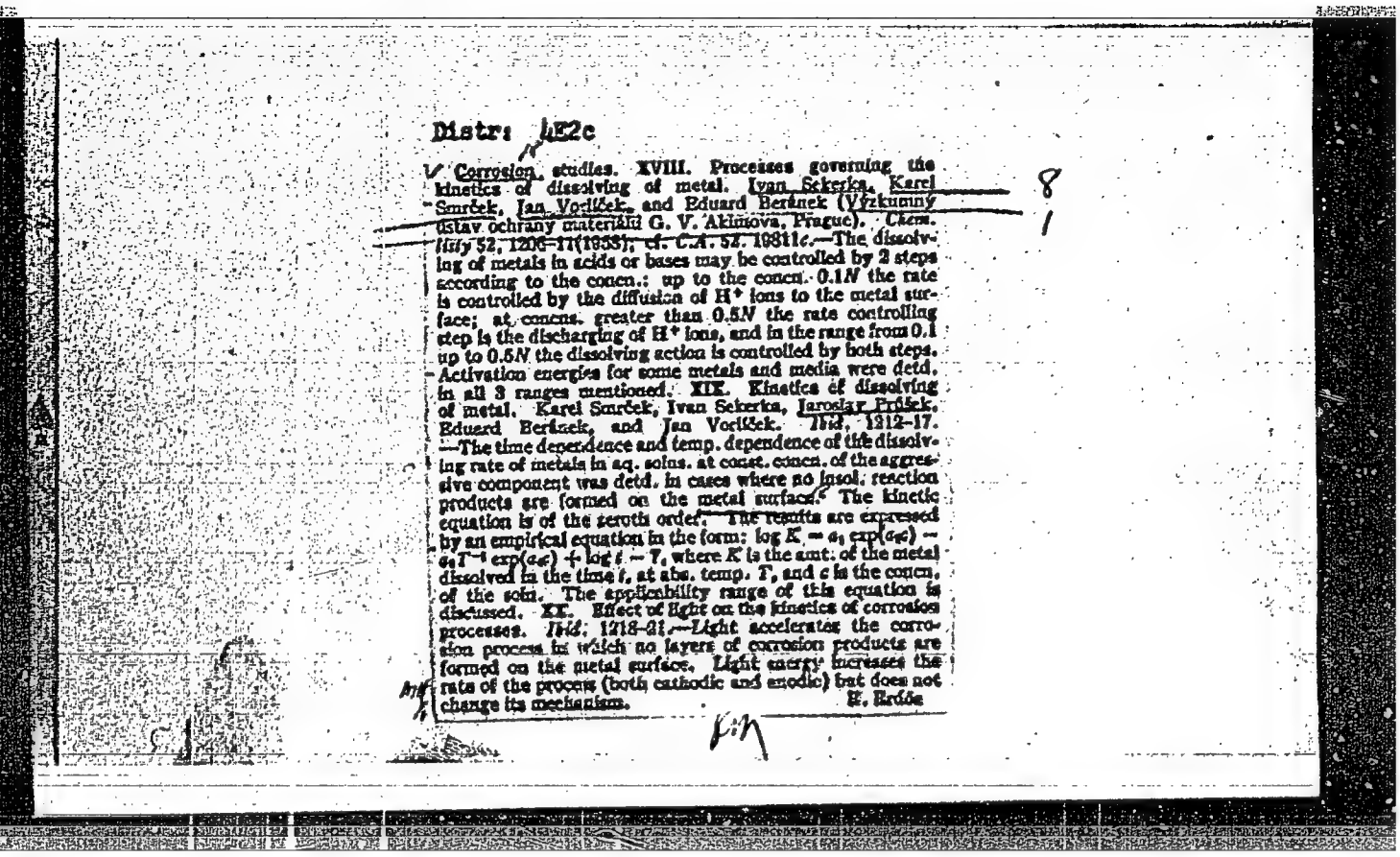
"Study on Corrosion. I. Contribution to the Polarographic Study on the Corrosion of Metals", P. 920, (CHEMICKE LISTY, Vol. 48, No. 6, June 1954, Praha, Czech.)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. 3, March 1955, Uncl.

VORLICEK, Jan, RNDr.; VYDRA, Frantisek, inz., CSc.

Direct complexometric determination of Fe^{3+} in ores. Hut listy 18 no.10:733-734 O '63.

1. Vyzkumny ustav zelezorudnych dolu a hrudkoven, Mnisek pod Brdy (for Vorlicek). 2. Polarograficky ustav, Ceskoslovenska akademie ved, Praha (for Vydra).



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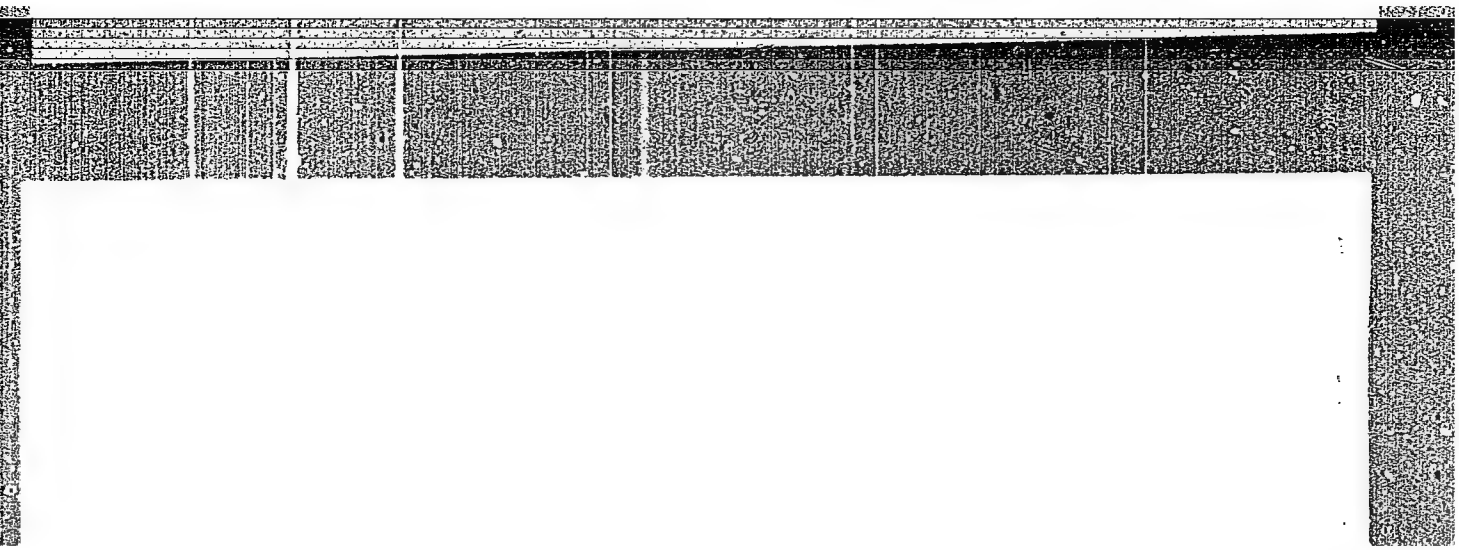
V Corrosion studies. XVIII. Processes governing the kinetics of dissolving of metal. Ivan Šekerka, Karel Šmrček, Jan Vorlíček, and Eduard Beránek (Výzkumný ústav ochrany materiálů G. V. Akimova, Prague). *Chem. Listy* 52, 1206–11(1958); cf. C.A. 52, 19811*e*.—The dissolving of metals in acids or bases may be controlled by 2 steps according to the concn.: up to the concn. 0.1*N* the rate is controlled by the diffusion of H^+ ions to the metal surface; at concns. greater than 0.5*N* the rate controlling step is the discharging of H^+ ions, and in the range from 0.1 up to 0.5*N* the dissolving action is controlled by both steps. Activation energies for some metals and media were detd. in all 3 ranges mentioned. XIX. Kinetics of dissolving of metal. Karel Šmrček, Ivan Šekerka, Jaroslav Průšek, Eduard Beránek, and Jan Vorlíček. *Ibid.* 1212–17.—The time dependence and temp. dependence of the dissolving rate of metals in aq. solns. at const. concn. of the aggressive component was detd. in cases where no insol. reaction products are formed on the metal surface. The kinetic equation is of the zeroth order. The results are expressed by an empirical equation in the form: $\log K = a_1 \exp(a_2 c) - a_3 T^{-1} \exp(a_4 c) + \log t - T$, where K is the amt. of the metal dissolved in the time t, at abs. temp. T, and c is the concn. of the soln. The applicability range of this equation is discussed. XX. Effect of light on the kinetics of corrosion processes. *Ibid.* 1218–21.—Light accelerates the corrosion process in which no layers of corrosion products are formed on the metal surface. Light energy increases the rate of the process (both cathodic and anodic) but does not change its mechanism. E. Erdös

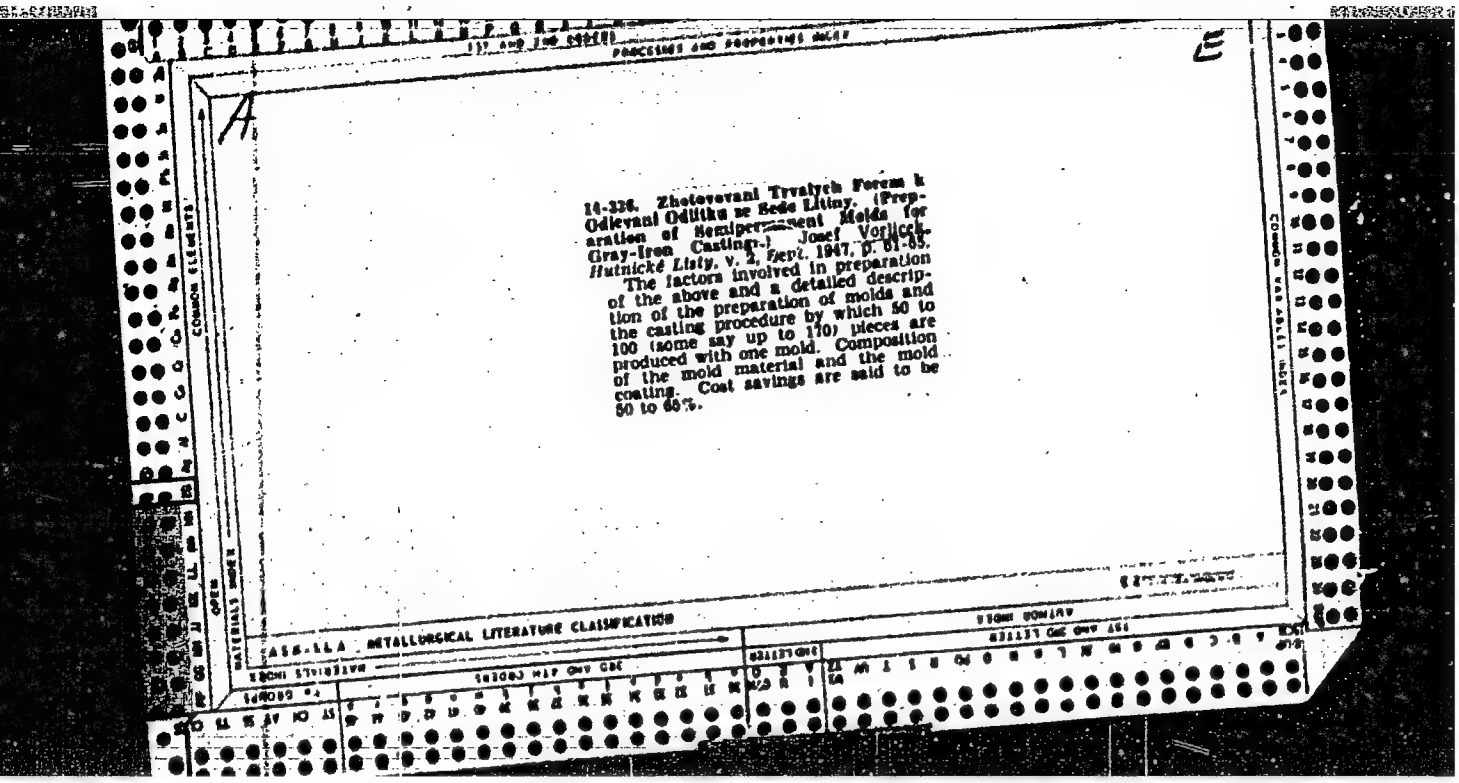


APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001860810014-2"

VORLICEK, J, SEKERKA, I.

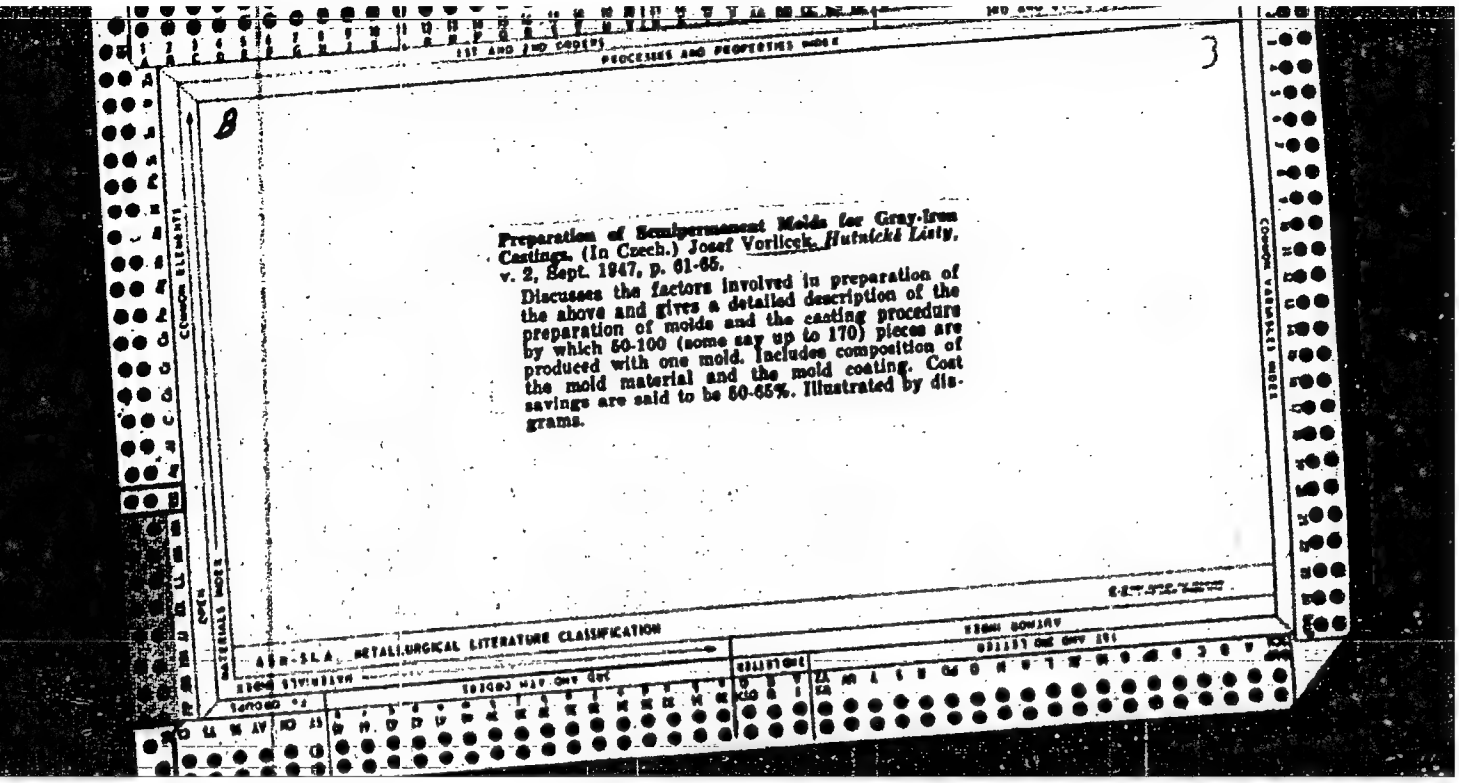
Vorlicek, J., Sekerka, I. Use of complexones in chemical analysis." XXXVII. Determination of uranium by the titration of ammonia with hypobromite. p. 512 CASOPIS PRO PESTOVANI MATEMATIKY. CZECHOSLOVAK MATHEMATICAL JOURNAL. Vol. 47, no. 4, Apr. 1953, Praha, Czechoslovakia.

SO: Monthly List of East European Accessions, LC., Vol. 3, No. 1, Jan. 1954, Uncl.



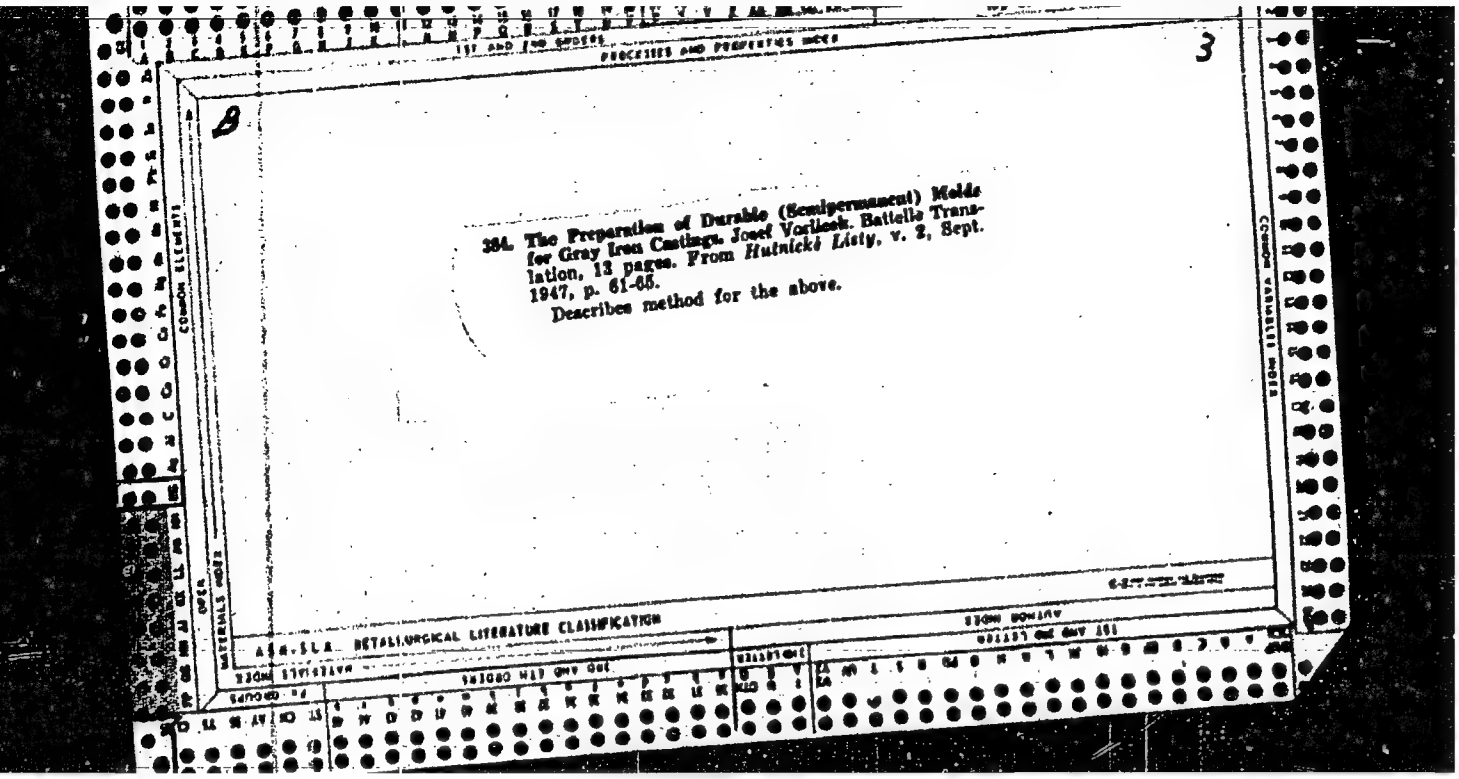
14-336. Zhotovovani Tvarych Forem k Odlevani Odlitku ze Bede Litiny. (Preparation of Semipermanent Molds for Gray-Iron Castings.) Josef Vorlicek. *Hutnické Listy*, v. 2, Sept. 1947, p. 81-85.

The factors involved in preparation of the above and a detailed description of the preparation of molds and the casting procedure by which 50 to 100 (some say up to 170) pieces are produced with one mold. Composition of the mold material and the mold coating. Cost savings are said to be 50 to 65%.

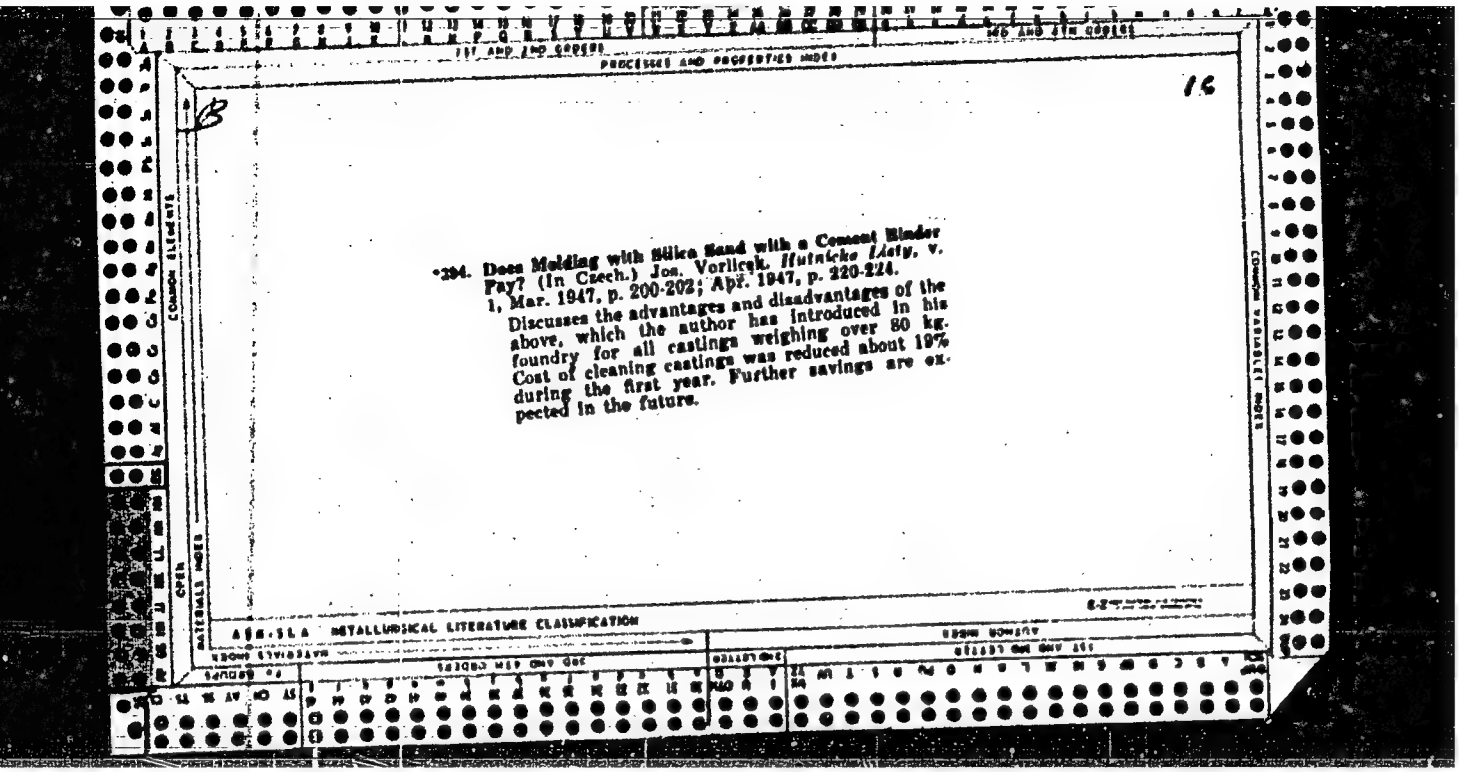


Preparation of Semipermanent Molds for Gray-Iron Castings. (In Czech.) Josef Vorlicek. *Hutnicke Listy*, v. 2, Sept. 1947, p. 61-65.

Discusses the factors involved in preparation of the above and gives a detailed description of the preparation of molds and the casting procedure by which 50-100 (some say up to 170) pieces are produced with one mold. Includes composition of the mold material and the mold coating. Cost savings are said to be 60-65%. Illustrated by diagrams.

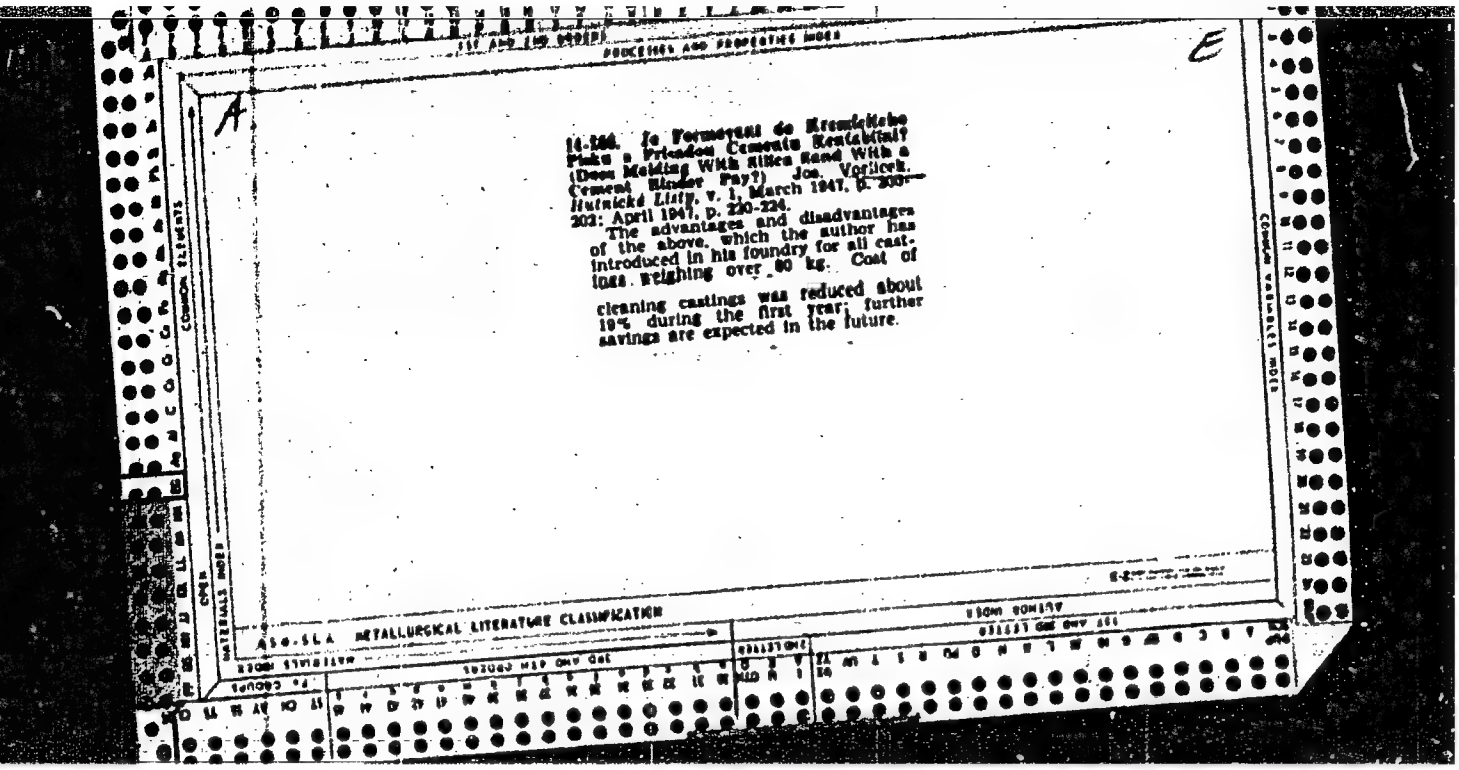


384. The Preparation of Durable (Semipermanent) Molds for Gray Iron Castings. Josef Vorlicek. Battelle Translation, 13 pages. From *Hutnické Listy*, v. 2, Sept. 1947, p. 61-65.
Describes method for the above.



•294. Does Molding with Silica Sand with a Cement Binder Pay? (In Czech.) Jos. Vorlíček. *Hutnické Listy*, v. 1, Mar. 1947, p. 200-202; Apr. 1947, p. 220-224.

Discusses the advantages and disadvantages of the above, which the author has introduced in his foundry for all castings weighing over 80 kg. Cost of cleaning castings was reduced about 19% during the first year. Further savings are expected in the future.



S/263/62/000/018/003/006
I031/I242

AUTHOR: Vorliček, Ivo

TITLE: Linear transistorized voltmeter

PERIODICAL: Referativnyy zhurnal, Otdelnyy vypusk. 32. Izmeritel(naya tekhnika, no. 18, 1962, 44, abstract 32.18.313. (Automatizace, v.5, no. 2, 1962, 47 [Czech])

TEXT: A small transistorized voltmeter has been developed by the Navika National Enterprises of Czechoslovakia. The voltmeter is very accurate, inexpensive, of simple design, and robust construction. The scale is uniform, the error not exceeding ± 1%. Permissible fluctuation of the supply voltage is ± 10%. The input resistance of the instrument is ~15 kohm. A special feature

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I031/I242

Linear transistorized....

of the voltmeter is the absence of electrical zero adjuster. A full description of the circuit diagram is given, including data for all the elements except those in the supply transformer, along with turning and adjusting instructions. The instrument is designed for measuring voltages ranging from 10 to 100 mV, the current requirement is ~ 40 mA, at 220V ac.

[Abstracter's note: Complete translation.]

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VORLICEK, Ivo

Transistorized linear A.C. voltmeter. Automatizace 5 no.2:47 F '62.

1. Navika, n.p., Praha.

VORLICEK, I.

Phasing four-terminal networks with constant amplitude transfer. p. 67.
SLABOPROUDY OBZOR, Prague, Vol. 15, no. 2, Feb. 1954.

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 5, no. 6 June 1956, Uncl.